

The National Locksmith®

\$5.00

CODES
1997-98 Buick Park Avenue
0001-1988
- page 136 -

August 1997
Volume 68, No. 8

Electronic Security!

What you don't know...
...CAN hurt you.

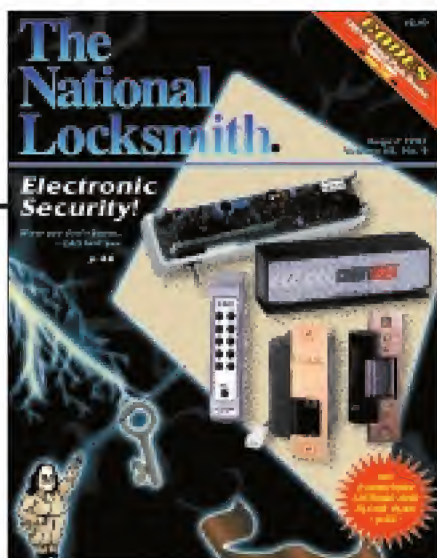
p.46



ISC
EXHIBITORS
LISTINGS AND
FLOOR PLAN
- p.62 -



On The Cover...



Since that first bolt of lightning electrified Benjamin Franklin's infamous key on a kite, electricity has touched every facet of our lives.

Publisher Marc Goldberg

Editor Greg Mango

Art Director Jim Darow

Production Director Edgar Shindelar

Production Assistants Kim Fryer
Dave Krofel

Technical Editor Jake Jakubowski

Senior Writers

Dale Libby, Dave McOmie, Sara Probasco

Contributing Writers

Tony Blass, Joe & Dee Bucha, Carl Cloud,
Ron & Chris Curry, Sal Dulcamaro, CML,
Steve Gebbia, CML, Michael Hyde,
Giles Kalvelage, Jim Langston, Tom Lynch,
Tom Mazzone, Don Probasco, Don Shiles,
Robert Sieveking

Special Correspondent Bill Reed

Director of Sales & Marketing
Jeffrey Adair

Advertising Account Manager
Debbie Schertzing

Circulation Manager Tom Dean

Accounting Manager Deborah Corzine

Shipping Manager Sean Selby

National Publishing Co.

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Call (773) 348-6358

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call (630) 837-2044, fax: (630) 837-1210,
or E-Mail: natlock@aol.com
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CONTENTS

The National Locksmith August 1997 □ Vol. 68, No. 8

FEATURES

18

The Almont "Re-Key" Padlock

A rather interesting rekeyable padlock available in fourteen keyways.

88

Norton PowerMatic Door Operator

Although the operation of the unit is sophisticated, the installation of the Norton PowerMatic is really not.

27

1995 Chrysler Le Baron

Chrysler added significant changes to thwart thieves of this vehicle.

98

Business Phone Etiquette

Knowledge, attitude and telephone etiquette can make or break your business.

100

The Lectro Truck

Moving safes the easy way.

124

EXL Exposé

Alphabet safes - their care and feeding.

130

VIEWPOINT: A New World Order

CODES 136

1997-98 Buick Park Avenue
0001-1988

62

Exhibitor Booth Listings & Map

ISC East, New York City.

66

Product Showcase

See most of these products at the ISC East Show.

85

The Bookmark

A review of the manual "Professional Car Opening, Volume 3" by PRO-LOK.

148

Delayed Egress Systems

Adhering to fire regulations for life safety while deterring theft.

152

No Holds Barred

Understanding detention facility locks and hardware.

DEPARTMENTS

- 5 COMMENTARY
- 6 MANGO'S MESSAGE
- 10 LETTERS
- 14 SECURITY CAFÉ
- 40 BEGINNER'S CORNER
- 58 BUSINESS BRIEFS
- 74 AUTO OPENING

- 104 THE LIGHTER SIDE
- 106 TECHTIPS
- 132 THRU THE KEYHOLE
- 134 REED REPORT
- 157 THE WEB ZONE
- 159 LOCKSMITH CALENDAR
- 166 TEST DRIVE

Click on the article
you wish to read

COMMENTARY



<http://www.TheNationalLocksmith.com>
User name: national User ID: G5fh84

Be a craftsman!

I remember way back in 1986 when I received a letter from a guy I never heard of. It was four pages, hand written on yellow legal paper, and I found the letter so interesting that I saved it, and will quote part of it here for you.

"*The National Locksmith* is quite simply superlative. Since the departure of Dale Libby a while back, the safe articles have been real weak.... I would like to request an application and/or audition for the job.

"I would love to contribute a monthly column on safes for *The National Locksmith*. In plain English, I WANT THE JOB!!!"

The writer also included several photos from his extensive collection of safe pictures. There was something about this guy that interested me...yes, he was sucking up, but it was clear he was bold and had a lot on the ball. But could this guy really write well month after month on safes?

I called him, and a week later I found myself at O'Hare Airport with a sign that said "M cOmie," because I had no idea what this guy even looked like. The rest is history.

Dave M cOmie has been writing excellent safe columns and books for this magazine ever since. Then Dale Libby rejoined the magazine, and along with other wonderful contributors such as Carl Cloud, we made *The National Locksmith* into the powerhouse on safes and safework.

That's why I am pleased to announce the publication of a new and really special book. It's called *10 Years of Dave M c Omie*. This book runs over 500 pages, and has a durable casebound hard cover. Inside this book, you will find reprinted each and every one of the articles that Dave wrote in his first ten years with the magazine, plus new notes, solutions, and cross references to make the information completely priceless. Check out page 26 for more detail.

Aren't you guys glad I didn't toss out that letter he sent me?

Speaking of new books, let me reiterate that the latest update for the AutoSmart is now available. I mentioned it last month, but I made a mistake on the page count. I said that the new 1997-1998 version of the AutoSmart featured over 500 pages. Oops. It's actually over 600 pages! You definitely will want to get your hands on a copy if you ever touch a car. See page 126 for further information.

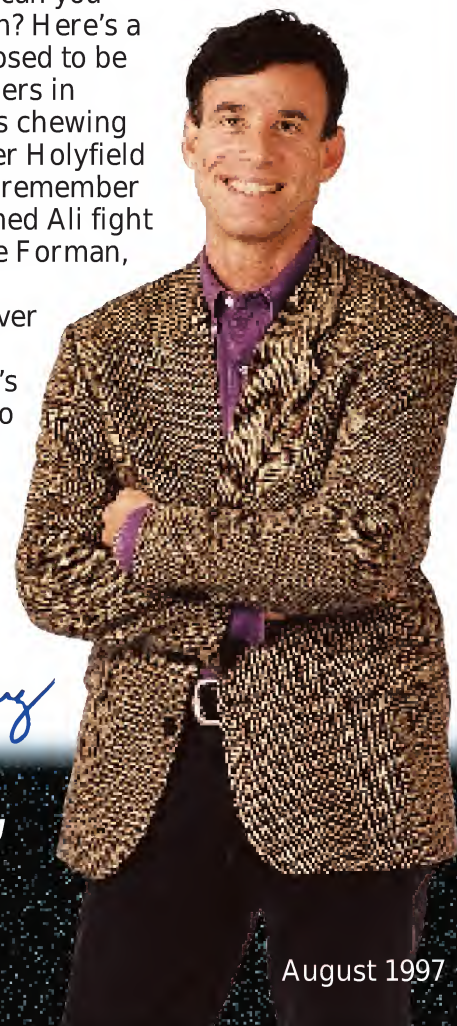
From time to time we receive questions from companies or associations on how they can get included in our December Locksmith Directory issue. If you are a manufacturer, distributor or association, and you were *not* included in last year's Directory, please take note.

Fax all your company information to us at 630-837-1210, and be sure to mention that the info is for our Directory. However, if you *were* included in last year's Directory, take *no* action at this time. You will be sent a questionnaire in order to update the info we currently have on file.

As a final note, can you believe Mike Tyson? Here's a guy who was supposed to be one of the best boxers in history and he tries chewing the ears off Evander Holyfield on live TV. Do you remember watching Mohammed Ali fight Joe Frazier, George Forman, and others?

Mohammed Ali never needed to use his teeth in the ring! It's always a pleasure to watch a craftsman. A butcher who tries shortcuts will never be a true champion. Enjoy the craft of locksmithing!

Marc Goldberg



Join our free E-mail list!

Receive locksmith info by E-Mail
Write us at: NATLOCK@aol.com

Marc Goldberg
Publisher

August 1997 • 5

Mango's Message



For the Love of Money

A few months back a friend of mine by the name of Mike Oehlert, called me at the office and asked, "Have you seen the new Spy HeadQuarters catalog?"

"No, can't say that I have" I replied.

"The Spy HeadQuarters catalog includes a release form which it titles *Certification of Eligibility for Locksmithing Tools* in each catalog that is to be filled out by the purchaser of locksmith devices such as lock picks or car opening tools. It's a joke!" Mike continued.

"You don't say" I commented. "I wonder what brought that about?"

For those of you who don't know, Spy HeadQuarters specializes in the sale of surveillance equipment, eavesdropping equipment, recording equipment and bypass tools to name a few. Just as the name implies, this company caters to those private detective wannabe's and folks who watched too many Mission Impossible and I Spy episodes.

A few years back I did an editorial on a company called "Spy Supply" which not only had a mail order business, but retail locations around the country as well. Their product line was the same as Spy HeadQuarters, catering to the super snoopy. The editorial was in regards to their blatant promotion and sale of lock picks and bypass tools to anyone through the mail. This, by the way, is against the law. Not that this company cared, but there is a law under the "Anti-Drug Abuse Act of 1988" which prohibits the mailability of locksmithing devices except to specifically identified groups.

At the time, Spy Supply was advertising an electronic lock pick complete with a 128 page manual for opening most locks in less than ten seconds — according to the ad — for \$199.00. The ad appeared in a magazine called The Robb Report, which caters to the rich and famous, as well as to those who dream about being rich and famous.

In my editorial, I stated the law that prohibited the salability of lock picks through the mail to anyone except a lock manufacturer or distributor; a bona fide locksmith; a bona fide repossessor; or a motor vehicle manufacturer or dealer. I also sent them the following letter:

SPY Supply 1-30-93
7 Colby Court, Suite 215
Bedford, NH 03110

Dear Advertising Representative:

While browsing through the December issue of the ROBB REPORT magazine, I noticed an advertisement by your company for an Electronic Lock Pick on page 99. This ad captured my attention and I was quite surprised and dismayed at the audacity and lack of responsibility on behalf of your company.

Perhaps you do not realize the potential of what you are selling through the mail, or the law that prohibits its distribution except under restricted circumstances. In all actuality, you are supplying anyone a tool, along with a 128-page instructional manual, by which to gain surreptitious entry into not only your home, office, business or automobile, but millions of others. Yet, I'd bet you would not even consider selling a duplicate key to your home, office, business or automobile for \$199.00, to anyone who could afford it.

You then proceed to take matters a step further by stating that, "No locksmithing skills are required." Locksmithing supplies and tools should only be used by, and supplied through the mail to, lock manufacturers or distributors; a bona fide locksmith; a bona fide repossessor; or a motor vehicle manufacturer or dealer. This is not just my opinion, it's the law. I have enclosed for your inspection, a copy of the law that states just that.

I can only hope that you will reconsider your position on this matter, and withdraw the advertisement of this product to avoid further embarrassment or ramifications.

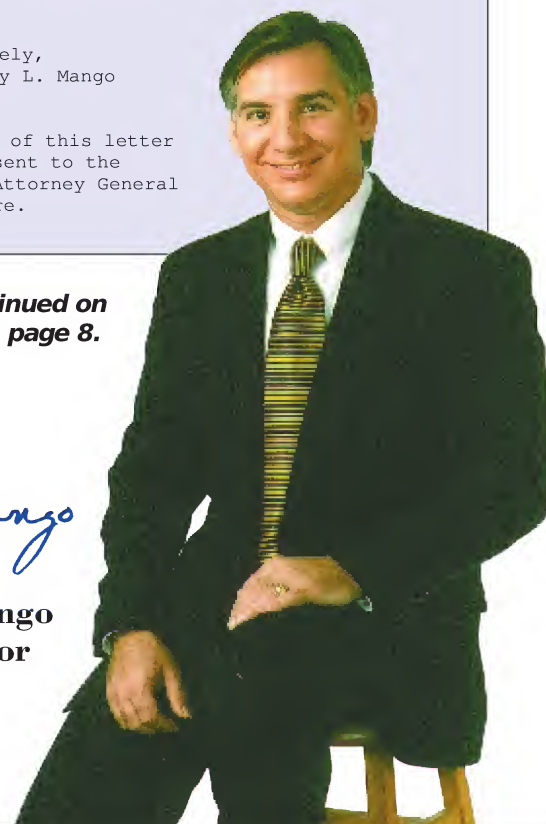
Sincerely,
Gregory L. Mango
Editor

P.S. A copy of this letter has also been sent to the office of the Attorney General in New Hampshire.

Continued on
page 8.

Greg Mango

Greg Mango
Editor





Continued from page 6

I have no idea if there is any affiliation between "Spy Supply" and Spy HeadQuarters, but apparently Spy HeadQuarters realized that without some form of control on the sale of lock picks and bypass tools, it was positioning itself in a rather vulnerable and potentially liable situation. So, as any ingenious company would do when confronted with a problem, it needed to devise a solution. The problem was solved — so they thought — with the inclusion of the following release form:

Certification of Eligibility for Locksmithing Tools

This section must be filled out and returned with your order when ordering any locksmithing device(s).

The under signed hereby certifies that he/she is eligible to receive and own locksmithing devices pursuant to 39 U.S.C. Section 3002a (a) because he/she is [check applicable box(es)]:

- ☐ a lock manufacturer or distributor
☐ a bona fide repossessor
☐ other (please specify) _____
- ☒ a bona fide locksmith*
☐ a motor vehicle manufacturer or dealer

This certification is made to induce vendor to send one or more locksmithing devices as defined in 39 U.S.C. Section 3002a (b) to the undersigned through the mail and it is expressly understood that the vendor will be relying upon this certification and the accuracy of statements contained herein in filling the undersigned's order.

Name _____

Mailing Address _____

Social Security Number or Driver's License Number _____

Phone Number (____) _____

Signature Mike Oehlert

*The statute does not define the term "locksmith". Webster's Dictionary defines a locksmith as "a worker who makes or repairs locks." It is the position of the vendor that the term "locksmith" may be deemed to include an individual or organization whose reasonable substantial portion of their job description includes activities normally associated with a locksmith as that term is defined. For example, but in no way limiting, the security or maintenance department of a hospital, tow truck operator, and so forth.

To see just how serious Spy HeadQuarters was about the salability of lock picks and bypass tools to anyone other than those specified in their own release form, Mike placed an order for a set of picks to see what questions and procedures, if any, would be asked or required of him.

To make things just a tad more interesting, sensitive background information about Mike — which was fabricated — was intentionally conveyed to the Spy HeadQuarters representative taking his order to see if it would sound an alarm. The following is what occurred.

"Spy HeadQuarters" a rather young voice stated.

"I'm on parole for robbery, Mike announced, "but I'm interested in locksmithing and would like to order a set of lock picks. Would that be a problem?"

"Well, I'll need to ask a supervisor" the man replied. "Can you hold?"

A few seconds later the order taker was back.

"That won't be a problem" he assured. "What would you like?"

Mike ordered a set of picks, charged it on his Visa card and then asked ...

"Do I need to fill out this "Certification of Eligibility" for

the purchase of the product?"

"No, not when you order by phone" he answered. "If you order through the mail, then you should send it in."

To no surprise, a few days later Mike (the ex con) received his pick set.

It certainly appears that the inclusion of the release form in the Spy HeadQuarters catalog was nothing more than a mirage. It was an artificial veil of security. Its intent was not to obey the law — even though they were obviously aware of it — and prevent bypass tools from falling into unscrupulous hands, but merely make it appear that it was taking measures to do so. In the end, not a law, ethics, or concern for public safety was the issue. It was money.

What is even more interesting than the fact that Spy HeadQuarters would sell lock picks to an ex con, is the fine print at the bottom of its Certification of Eligibility for Locksmithing Tools. It reads:

The statute does not define the term "locksmith." Webster's Dictionary defines a locksmith as "a worker who makes or repairs locks." It is the position of the vendor that the term "locksmith" may be deemed to include an individual or organization whose reasonable and substantial portion of their job description includes activities normally associated with a locksmith as that term is defined. For example, but in no way limiting, the security or maintenance department of a hospital, tow truck operator, and so forth.

In other words, it is Spy HeadQuarters contention that anyone who touches a lock can be deemed a locksmith. That may seem ridiculous, but is it?

If you do not live in a state that requires a locksmith license to operate, what qualifies you as a locksmith? If you are not identified by the state as such, and the only qualifiers you have is that you work on locks, would that not mean that anyone who has worked on a lock can then be classified, or rather, deemed a locksmith?

If the previous statement is true, is the actions of Spy HeadQuarters really that atrocious, or is our interpretation of its action atrocious? Is what they are doing against the law, or have they simply exploited a loophole in the law?

When locksmiths in most states are not even recognized as a licensed trade, and the military categorizes locksmiths under the guise of a Carpenter, what exactly is a bona fide locksmith? And, does the "NON MAILABILITY OF LOCKSMITHING DEVICES" under the "Anti-Drug Abuse Act of 1988" have any teeth, or is it a clever term for dentures?

You be the judge. **TNL**



AUGUST 1997

Letters

The National Locksmith is interested in your view. We do reserve the right to edit for clarity and length.

In Memory of Chris Christman

Chris Christman was employed as Locksmith Chief Instructor and Product Manager for Foley-Belsaw Company since May 1983. Chris was a very dedicated individual who worked most of his life for Locksmiths and the betterment of the trade. He loved his work and it showed — Chris will be sorely missed by his work associates and the many friends he made over the years. Our deepest sympathies go out to Chris's wife, Alenna, and his family.



Cutting Out The Locksmith

I always thought a distributor was the link between the manufacturer and the retailer. Apparently I was wrong. I have found that distributors for major manufacturers sell to the end user all the time.

A distributor in my town recently

sold 50 brand name padlocks after two other locksmiths in the area had quoted the job. I was one of the two who had quoted on the job.

After bidding on the job, I contacted this same distributor for a delivery time on the padlocks and was told two to three weeks. I found it quite interesting when in fact this same distributor who eventually won the bid, delivered the same padlocks I was told would take two to three weeks, the very next day.

When I confronted the distributor it didn't seem to feel there was a problem and said the manufacturer supported their practice. They said they sell all over the world at wholesale prices whether it be one lock or a hundred.

In my opinion, this is a disservice to everyone in the industry from top to bottom. We have always had this problem, but now it seems the major manufacturers are giving this practice their blessing.

I wonder if these same companies will start selling direct to the locksmiths and cut out the distributor? How would the distributors feel then? I bet they would not like it any more than I like them selling direct to my customers.

I have been locksmithing for 26 years and have seen a lot come and go. I feel this practice is flat wrong.
*Harold Wager
Florida*

An Offer Of Employment

This letter is in response to the letter by C.H. Martin of South Carolina "What Does It Take" printed in the June issue.

I'm really sorry that occurrence happened to you. Although there are a few of the "200 years in the family business big guys" out there, my



America Online:
NATL LOCK
Use the above address
if you are on AOL.

Internet:
natllock@aol.com
Use the Internet address
if you are not on AOL.

experience with the real locksmiths and not the fly-by-nighters, has been relatively good.

I started out in locksmithing when a man asked me if I'd like to learn the trade on the job. That was 18 years and three states ago. I just started my own business and am already fairly busy and my Yellow Page ad does not come out until the fall. If Mr. Martin thinks he would like to move to the Durham-Chapel Hill area, I could use a motivated apprentice. If you're willing to learn, I'm willing to teach, just like my first boss did for me.

If you're interested call me at:
(919) 572-6985.

*Lee BamBam Rubenstein
North Carolina*

A Great Rate

I am rather new to this industry — about a year or so — and have found the Flat Rate Manual published by you to be a lifesaver. My wife went through it and programmed our rate (\$30.00 per hour) and I entered it into my Quick Books Pro accounting software program and have no problem billing a job or estimating it.

*William Wheeler
E-Mail*

Continued on page 12

The National Locksmith
1533 Burgundy Parkway
Streamwood, IL 60107
Attn: Editor

Continued from page 12

NASIR Meeting

The National Association of Security and Investigative Regulators (NASIR) met in North Carolina from June 4-6. Regulators representing 33 states are members of NASIR. These are the people who run the licensing departments in each state. Also in attendance were board members, like myself, and many associate members from the security industry. Associate members like Brinks, Pinkerton, Burroughs, Security Link and lobbyists from the alarm industry and the private security industry were also there.

I was the only representative from the locksmith industry, thanks to the Greater Chicago Locksmith Association, which paid for my trip. I participated to let the regulators know our views and to learn what the security industry is doing.

The alarm industry, private investigators, and guard services are sitting down with the state regulators in committees, at lunch and dinner, and social activities after meetings. They are making this effort to see that legislation works for them and for the regulators. These industries are clearly concerned about their futures and are working hard to make it a good one.

Topics of major discussion were:

1. uniform national training programs
2. uniform requirements from state to state
3. model laws for each industry
4. reciprocity between states
5. positions on laws affecting the security industry

Locksmiths came under discussion in the legislative committee. The state regulator from

California stated that locksmiths are regulated (licensed) in California because it is a public safety issue. "We found we had a locksmithing training program in the California penal system. When a consumer has a locksmith come to his home, we should not be sending a convicted felon to change the locks."

He made a motion that the locksmith model law, presented by ALOA at the last meeting, be incorporated with the other security industries model laws of NASIR. The motion passed.

It was also stated by the lobbyist for the Electronic Security Industry (alarm representatives voted to change their name at NASIR) that locksmiths are now covered by the recent law passed in Texas, because all electronic security is covered by the law. Anyone who does this work now or in the future is considered by the regulators to need a license.

Those locksmiths will need to pass a test designed by and for the alarm industry. Locksmiths should be taking classes and exams designed by locksmiths. He said there is a clear overlap between the two industries and they have tried to work with the locksmiths in several states for joint licensing. They have been very frustrated by the opposition from "locksmiths crawling out of the woodwork at the last minute" and having the locksmith portion pulled out of the bill at the last minute.

Some locksmiths are afraid of what legislation or licensing will do to their business. I am afraid of what legislation (adverse) will do to our industry if we do not take the lead, as other security industries have done. The regulators feel there is a need to protect the public. In Illinois we fought several pieces of bad legislation before we recognized the need to write legislation we could live with that would help our industry, not harm it.

A close friend recently said "If I'm not part of the solution, I'm part of the problem." I invite all of you to become part of the solution. Our future depends on you. *Kathy Zaniolo, CPL
Illinois*

Access to the World

Don't look now, but the future is about to byte you from behind. The INTERNET is upon us and here to stay. It is currently available to 45

million viewers all over the world. Can you imagine what an advertising campaign you could mount for your service or product?

Let's assume you manufacture a lock. There is no initial cost if you design your own page (approximately a \$1,000 dollars for a professional advertising layout) then only about \$60.00 a month to keep your page on the Internet. Once on the Internet, access to your information is available 24 hours a day, reaching 45 million people who can tap into a list of all the parts they may need to repair a lock and order from you in a nano second.

Even as you read this the Internet is growing at such an exponential rate, that by the year 2000, it is estimated that there will be 200 million people reading, searching, adding new articles of information and domains of advertising sites. What ever you want to know or when ever you want it, it will be there for you...on the Internet.

I know there are some of you still asking, "What is the Internet?" Simply stated, it is your computer connected to a network computer (called a Server) linked by a local phone line. The server is connected to all the other servers in the world by telephone lines, which are all connected together. It is like a big spider web linking one computer to another. That is why it is nicknamed "THE WEB."

So, how do you get on this information highway called the Internet even if you know nothing about computers? All you need is a computer, a modem which is needed to connect with the phone line and software which is usually provided by the Internet provider you choose such as: America Online, MCI, Compuserve etc.

My advice to you is go out and buy a computer with the necessary hardware and then subscribe to a service provider. For about \$19.00 per month, you can access the Internet. You will be surprised how much knowledge and entertainment you are going to receive for such a small investment.

When you get up and running drop me an E-mail note. My address is: mejer@gate.net. See you on the Internet.
*Jerold R. Ford
Florida*

TNL

Security Café

**DROP IN FOR
TOOLS, TECHNOLOGY
& EQUIPMENT**

GTO's New Bulldog Design



The new Bulldog has a more compact control box and redesigned control board with an adjustable "turning pod" to allow locks to accommodate a two to six second release time. Best of all, it is priced even lower than previous models. This is the ideal lock for protecting swimming pools, tennis courts, playgrounds, controlled employee entrances, hazardous material areas, boat docks, marinas, and other limited access areas which call for a highly effective security lock.

Designed for mounting on all types of gates, the Bulldog meets safety code

standards for swimming pool enclosures and accommodates open-in or open-out installations.

H. E. S. Acquires Delta Security Controls



Delta Security Controls is now a division of H.E.S., an innovator in the electric strike market. Delta offers an expanded line of durable and distinctive Push Plate Control Assemblies. These 106 and 107 Series devices are suitable for a variety of applications and offer the specifier a device that provides a clean, "high-tech" appearance that enhances architectural design. A number of different sizes and shapes are offered, and a variety of features and options are available to satisfy individual application needs.

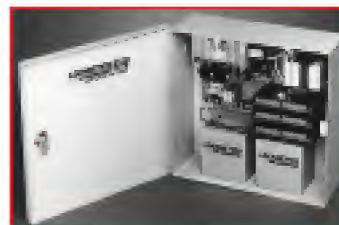
New Series 5 Olympus Borescope from Lockmasters® Inc.

The new series 5 family of Olympus borescopes is the result of three years of

intensive research. This redesign provides the brightest, largest, most precise images available with a borescope and a new level of efficient, easy operation. Inspections are faster and more accurate than ever before. Ideal for use with cameras, the Series 5 scopes produce video images that are bright and right in details.

Special features include: orbital scan mechanism, V-notch image orientation indicator, available in 1/4" diameter and lengths of 18-7/8" and 25" larger, multicoated lenses reducing glare and increasing resolution, variable focus, and a less fatiguing ergonomic handle.

Locknetics Power Supplies



Locknetics Security Engineering's complete line of modular power supplies, which includes the 505, 510 and 515 series, are now listed by Underwriters Laboratories (UL) under category "General Purpose Power Supply." All three series feature field selectable voltage output at 12 or 24 VDC. All have regulated and filtered output power with built in battery charger. Power ratings range from 1 to 10 amps. Options include EIR, emergency interface relay, RCM, relay control module, DCM, dual control module and TDM, time delay module.

New MAG Security Clip Strip Display



To provide greater utilization of small spaces and dramatically increase impulse sales, MAG Security has introduced an innovative clip strip display. Designed to highlight the manufacturer's door and window security reinforcement hardware, the pre-loaded plastic strips are packaged with 12 units on each strip.

The clip strips are available with a stainless steel display bracket that holds up to three strips on vertical steel beams or a bracket with an extension arm (10" or 12" projections) that enables the hanging of up to three strips on only two pegboard holes.

New 30,000 Pound Capacity Lift-A-Load Trailer

Lift-A-Load Model EPG-1520 is an elevating platform trailer that raises

Unlock a Cool One By DRK Specialties

With these keys from DRK Specialties, there will be no more stubborn tops or broken nails when using these handy can and bottle openers to open a beverage. Colorful cards and displays make these assortments great impulse items.



Continued from page 14

SECURITY CAFE

level to a height of 60" or lowers flat to the ground with a maximum payload of 30,000 pounds at 50 m.p.h..

Lift-A-Load can be stopped at any height dock for quick, convenient material transfer. The simple operation and unique flexibility allow one person to load and transport up to 30,000 pounds of cargo in one of several Lift-A-Load models available.

PRO-LOK's New Padlock Servicing Tools



PRO-LOK® has developed new machined aluminum padlock service tools for professional locksmiths. The green anodized LT605 Disk-buster® is a fixture that automatically lines up your drill bit to penetrate the shear line on disk-type padlocks, allowing safe, simple openings. The gold anodized LT612 Padlock Drill Jig® lets you drill most rekeyable padlocks open while saving the lock body and cylinder. The black anodized LT612 DG Drill Guide is an optional attachment that centers the oval retaining nut on the bottom of many rekeyable padlocks allowing you to drill it out, service the cylinder and reuse the padlock.

Alarm Lock's Sirenlock™ Model 715

Alarm Lock Systems, Inc., offers the Sirenlock® Model 715, "Time-Out" delayed egress system. Featuring a 15-second delayed egress



with instant 95 db dual piezo horn alarm, an instant alarmed exit and an easy-to-install, self-contained surface-mount unit in a standard panic bar design.

A smoke detector input can be used with existing smoke detectors or from a stand-alone smoke detector powered from the 715. An armored door cord and cables are included for wiring, as well as a 9-volt battery back-up that powers the siren in the event of a power failure.

Pro Max™ Full Metal Jacket

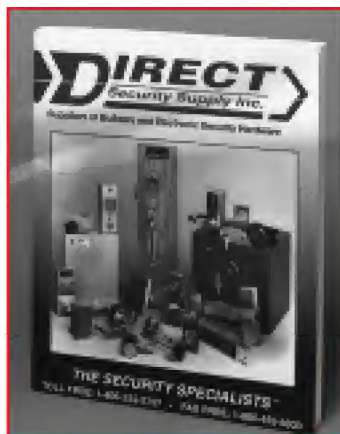


ABUS Lock Company introduces the new Pro Max® #83/45PA, which features different gullet size adapters for multiple uses. The PRO MAX padlock protector provides maximum shackle protection from boltcutters and prying devices. Developed and manufactured in New Zealand for hasp and chain applications with the 83/45 padlock, the unique design and 4 gullet adapters provide maximum protection

from boltcutters and prying devices.

PRO MAX is constructed with a zinc boron alloy and finished with powder coated black epoxy for long life against the elements.

Direct Security Catalog



Direct Security Supply recently introduced its latest product catalog with 320 pages of product specifications on an extensive inventory of builders and electronic security hardware. Clear, concise drawings and technical information on thousands of security products and accessories enable the installer to make accurate decisions regarding design, finish, function or voltage. Direct Security Supply Stocks quality manufacturers such as Adams Rite, Amsec, Baldwin, Detex, Falcon, Folger Adams, H.E.S., Ives, Locknetics, Monarch, New England, Securitron and Simplex.

Keedex Armored Door Loops

Keedex, Inc. has expanded their



line of Armored Door Loops to a total of ten different models. The Keedex Armored Door Loops are available in both 1/4" and 3/8" diameters. Available lengths are: 18" and 24". Powder Coat finishes include: Duranodic, Aluminum, White and Gold. Keedex Armored Door Loops are available from your local distributor.

NKL Introduces AVL Activity Verification Lock



NKL has released the AVL Activity Verification Lock, a product designed specifically for the growing safe retrofit market. This new product offers a cost effective alternative to complicated and expensive smart lock retrofits, for the first time.

The AVL offers a standard footprint replacement for ease of installation. Advanced features such as programmable time lock; door condition monitoring; armor car override capabilities; and dual keys are standard with the AVL. The audit trail retains up to 500 activities, and it can be easily printed or viewed in the lock's LCD screen. The AVL utilizes all Dallas Semiconductor keys. These features allows for easy integration into existing operations. **TNL**

The ALMONT "RE-KEY" Padlock

The Almont "Re-Key" is a rather interesting rekeyable padlock (see Photograph 1). Available in fourteen different keyways, there is an Almont lock that can be keyed to most any common commercial keyway. It is available in either 1-1/2" or 1-3/4" padlock body versions, but are all key retaining in function. Because of its unorthodox key coding procedures (compared to what most locksmiths might be familiar), it can be somewhat intimidating to attempt to service this lock for the first time. If you are not afraid to learn the proper procedures, this lock can be surprisingly fast and easy to service.

Servicing Tools

Photograph 2, shows an Almont padlock with the No. 3 (Schlage C) keyway, and keys and servicing tools. To the right of the padlock is a modified operating key with a notch on the bottom at the tip end. This modified key is necessary for plug disassembly, but I'll explain how in greater detail later. In front of the padlock are assorted servicing tools.

The bent wire tool to the left in photograph 2 is necessary to retain

1. The Almont "Re-Key" padlock.



by
Sal Dulcamaro

the top pins and tumbler springs when removing the plug for servicing. This wire tool is designed for the 1-3/4" body padlocks. There is a slightly smaller one available for 1-1/2" body padlocks. In front of the padlock are tools used for loading the top pins and tumbler springs. The device that looks like a cylinder plug (with six pin chambers in it) is called the loading tool. Within the flat keyway of the loading tool is a tool appropriately called the "flat tool". It is a flat piece of metal with a tapered tip surface designed to push top pins and tumbler

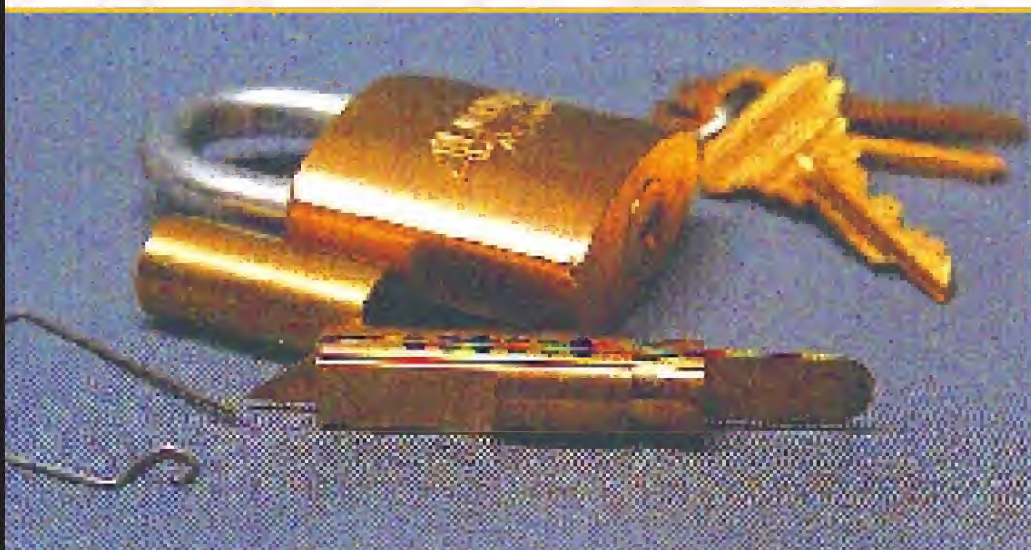
springs up into the top pin chambers. Between the padlock and the loading tool is a hollow brass tube called the sleeve.

Servicing the Almont "Re-Key" Padlock

Photograph 3, is a bottom view of the Almont padlock. To the left of the keyway (at about 8 o'clock on a clock face) on the outside circumference of the plug face is what appears to be a hole. It is actually a slot that is cut all the way back to the rear of the plug. This slot is there to accept the wire tool when servicing the lock, but the plug must be rotated far enough so that the slot is in line with the upper pin chambers.

An operating key has been used in Photograph 4, to turn the plug and open the padlock. That is the limit of rotation when using a normal operating key. Notice that the slot is now very near to the top, but it stops at about 11 o'clock. The slot must move a bit further (to 12 o'clock) to allow the wire tool to insert directly below the top pins in the upper pin chamber.

There is a stop pin in the inside wall of the cylindrical cavity of the padlock body that contains the plug. The bottom tip end of the normal operating key hits that stop pin to limit rotation of the plug, and to prevent the



2. An Almont padlock with the No. 3 (Schlage C) keyway.



3. A bottom view of the Almont padlock.

plug from coming out accidentally during normal key operation. A modified operating key, with a

notched bottom tip, will allow the plug to rotate beyond 11 o'clock since there is no key surface to hit that pin and limit the rotation.

Photograph 5, shows the notched key being inserted into the keyway. The instructions indicated that the notch should be cut with about 3/32 inch of material removed from the bottom surface of the key and going back about 3/8 inch from the tip end.

The notched key has rotated the plug in Photograph 6. Notice the slot in the plug has rotated past the normal limit (at 11 o'clock with a normal operating key) and is at 12 o'clock. The slot is directly under the upper pin chambers. The plug will actually rotate a bit further than that, but you must stop at that location so that the wire tool can be properly inserted for plug disassembly.

I'm holding the wire tool in Photograph 7. The shape bent into it almost looks like a house with a pointed roof on top. The long straight bottom portion (touching my thumb) is the part that inserts into the slot opening. The formed shape of the wire tool is designed to help it stay clipped to the padlock body, while



4. An operating key used, to turn the plug and open the padlock.

removing the plug or re-installing it back into the padlock.

The wire tool is being inserted into the slot in Photograph 8. The straight bottom portion should be pushed all the way in, until the 90 degree bend of the tool stops at the bottom face of the padlock. Photograph 9, shows the tool

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5. The notched key being inserted into the keyway.

fully inserted, with the top (pointed roof portion) of the tool maneuvered to clip securely onto the side of the padlock body. Notice (at the right side of the photo) that the vertical portion of the wire tool is tightly pressed against the bottom face of padlock. When inserting the wire tool, sometimes the tool stops before fully entering the slot. If that occurs, wiggling the tool and/or the plug sometimes helps to push the tool all the way into the slot. Make sure that

the wire is fully inserted, or the wire tool might not properly clip in place on the padlock body.

Photograph 10, shows the bottom face of the padlock with the wire tool in place. The wire runs just below the top pin chambers and holds the top pins and tumbler springs from popping out as the plug is removed from the padlock body as in Photograph 11.

Photograph 12, clearly shows the physical construction of the plug just



6. Notice the slot in the plug has rotated past the normal limit.

removed from the lock. You can see the long narrow slot that the wire tool went through. That slot runs from the face of the plug toward the tail end. There is another slot that is wider and that runs part way around the circumference of the plug. It is about 1/3 the way from the back end of the plug. If you look at the bottom of the plug you will also see that the bottom of the keyway is wider just past where the notched key tip starts.

Continued on page 22



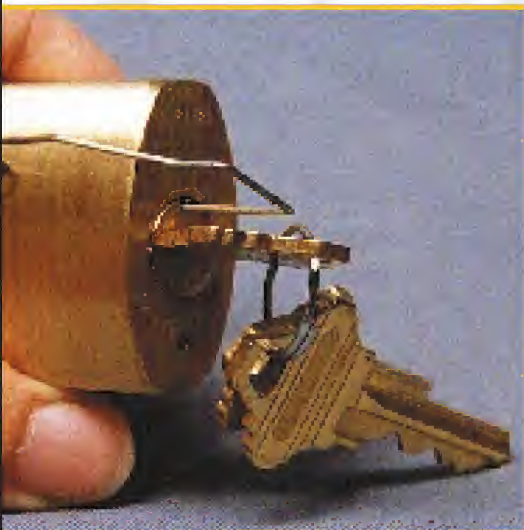
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Continued from page 20



7. The shape of the tool almost looks like a house with a pointed roof on top.



8. The wire tool inserted into the slot.



9. The tool fully inserted, with the top of the tool maneuvered to clip securely onto the padlock body.

Photograph 13, shows the open cavity inside the padlock body with the plug removed. If you look inside the opening toward the left (at about 9 o'clock), you will see the protruding pin that both acts as a stop and a retainer when a normal operating key is used. The slot that runs around the circumference of the plug (about 1/3 the way from the back end of the plug) rides along that pin during plug rotation. The wider slot at the bottom of the keyway begins at the point where the slot around the circumference is located, and extends backwards to the end of the plug.

When the normal operating key is rotating the plug, the material at the bottom tip end of the key hits the pin and stops rotation. If the notched key is rotating the plug, the lack of material at the bottom tip end allows the plug to rotate a bit further. When the plug is rotated far enough, that pin is directly in line with the wide slot at the bottom of the keyway. By pulling the plug outward, the slot in the bottom of the keyway will ride on that pin as the plug comes out of the padlock body.

If you look back at Photograph 13, you will see how the wire tool extends inward holding the top pins and tumbler springs when the plug is out of the lock. Because of the length of the wire tool, it also retains one of two locking balls that is on the same side as the top pin chambers. The wire tool is not necessary to remove the plug. When rotated far enough with the notched key, the plug will come out whether or not the wire tool is in place. If you remove the plug without the wire tool in place, all the top pins and springs will shoot out.

When picking an Almont padlock, the plug can rotate as far as a notched key would allow. If you aren't careful, it is possible to accidentally remove the plug when pulling the pick out of the keyway. Again, parts could come flying out. Only with the wire tool in place can the plug be safely removed without other unintended parts coming out.

Unloading and Reloading the Top Pin Chambers

With the plug removed in Photograph 14, the shackle will also come out. The tail end of the plug normally keeps the locking ball pressed against the shackle. When the plug starts to come out of the lock, the shackle spring tries to push the



10. The bottom face of the padlock with the wire tool in place.

shackle outward. At the same time, the locking ball gets pushed into the empty cavity where the plug used to be. When the locking ball is no longer there to hold the shackle, the shackle will be pushed out by the shackle spring.

Almont padlocks normally come from the factory coded to five cut keys. You will notice in photograph 14, that the plug has five bottom pins to coincide with the five cuts on the key. The plug and the upper pin chambers, however, are drilled for six pins. The last chamber in the plug and upper pin chamber are left empty when the padlock is coded to a five cut key.

In Photograph 15, the wire tool was removed which allowed all the top pins and the tumbler springs to come out. The other locking ball for the shackle also came out. For normal rekeying, it is not necessary to bother with the top pins and springs. As long as the wire tool is secure, only the plug need be removed for rekeying, and later reinstalled. To code a padlock from five to six pin chambers loaded, you will need to remove all the top pins and springs and then reload all six of the upper pin chambers together. Although possible, it's not really practical to just load the sixth



11. The wire runs just below the top pin chambers and holds the top pins and tumbler springs from popping out.

pin chamber on top without moving the wire tool far enough to release all (or most of) the other pins and springs.

If you look back at *Photograph 2*, you will see that the loading tool has six pin chambers. It can be used to load top pins and springs for up to all six pin chambers. It can also be used to load as few as one pin chamber. Since I am re-coding the lock to work with the same five cut key, I will only be loading the first five pin chambers on top.

The loading tool and sleeve are shown in *Photograph 16*. The back end of the tool is toward the left. Since

only five chambers are to be loaded, the last (sixth chamber) will be left empty. Top pins are loaded first into each of the first five chambers, then tumbler springs are loaded on top. The tumbler spring in the first chamber was compressed to fit within the chamber and the slide was slid over the top to contain it. The tumbler spring in the second chamber is next in line. It will be compressed next and covered by the slide. The action will be repeated for the third, fourth and fifth chambers. After all the chambers of the loading tool are filled, the slide will cover it completely. That will prevent the tumblers and springs from coming back out, until the loading tool



12. The physical construction of the plug just removed from the lock.



13. The open cavity inside the padlock body with the plug removed.

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14. With the plug removed the shackle will also come out.



15. The wire tool was removed which allowed all the top pins and the tumbler springs to come out.

is inserted into the plug cavity inside the padlock.

Before reloading the upper pin chambers, the locking ball that goes on the same side of the upper pin chambers should be reloaded. The padlock body should be placed so that gravity will keep that locking ball in place until the loading tool is fully inserted.

Photograph 17, shows the loading tool positioned so that pin chambers in the top and bottom are not directly aligned. If it is positioned with the chambers in alignment, the tumbler spring will force itself into the wrong upper pin chamber and trap the loading tool. The sleeve stops at the front of the padlock's plug opening, while the loading tool is pushed inward.

The loading tool is fully inserted in Photograph 18. The loading tool is positioned so that the top pins and

tumbler springs are still contained within it. If the loading tool is rotated slightly counterclockwise, the upper and lower chambers will be aligned. The force of the compressed tumbler springs will push them from the loading tool into the empty upper pin chambers. The flat tool is then inserted into the open keyway slot of the loading tool, to force the top pins also into the upper pin chambers (see Photograph 19).

The flat tool should remain inside the keyway of the loading tool while the loading tool is rotated slightly clockwise. It should be rotated so that the slot (identical to the one in the cylinder plug) for the wire tool is directly in line with the upper pin chambers. The wire tool should then be inserted to retain the top pins and tumbler springs inside the upper pin chambers (see Photograph 20). The loading tool (and flat tool) can then be removed.

Because the shackle and the second locking ball are probably still not in place yet, that will be the next order of business. The shackle (with shackle spring) are inserted first. Then the second locking ball can be dropped into the open plug cavity, where it can be maneuvered into its proper position. Since the wire tool will be holding the one locking ball, you should position the padlock body as in Photograph 21. Gravity will help to keep it from coming back out.

You must hold the shackle part way in to counter the pressure of the shackle spring which will try to push the shackle and locking ball back out. That pressure will continue until the plug is fully inserted, and then the end of the plug (pushing against the locking ball) will keep the shackle contained.

Once the plug is fully reloaded, the wire tool should be removed. Since the padlock is key retaining, the key will not turn back fully counterclockwise until the shackle is closed. After removing the notched key, it is a smart idea to put it away. Otherwise you might accidentally use it as an operating key and mistakenly pull the plug out of the lock.

Servicing Notes

If you are coding an Almont "Re-Key" padlock to use a six cut key, the notched plug removal key will have similar, but different notch dimensions. Because the pin is still



16. The loading tool and sleeve.



17. The loading tool positioned so that pin chambers in the top and bottom are not directly aligned.



18. The loading tool is positioned so that the top pins and tumbler springs are still contained within it.

located in the same exact position, the measurement from the shoulder of the key to the start of the notch will be exactly the same. Since the six cut key overall is longer than the five cut key, however, the measurement from the tip of the key back toward the shoulder will be greater.

There should be no difference as to how deep the notch is cut into the bottom of the key. When rekeying a lock, you will need not only a notched version of the current operating key, but also a notched version of the new key to which you are coding the lock. A notched tip key is needed for both removing and re-installing the plug.

Standard rekeying of the Almont padlock will not require unloading or reloading the upper pin chambers. That will only be required if you are switching from five to six pin, or if you accidentally or intentionally dump the top pins and springs. I would recommend unloading and loading the top pins a few times for practice and as a confidence builder. It is easier than it might appear.



19. The flat tool is then inserted into the open keyway slot of the loading tool to force the top pins also into the upper pin chambers.



20. The wire tool should then be inserted to retain the top pins and tumbler springs inside the upper pin chambers.



21. The wire tool will be holding the one locking ball.

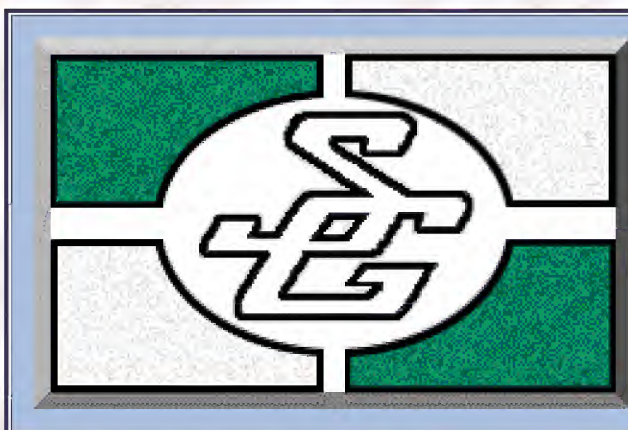
It is imperative to not leave empty chambers in the plug, or rotating the plug before it is fully inserted into the padlock body. If you trap the plug part way into the plug cavity, I don't know of any practical way to get it back out.

Final Comments

Until recently, I had never unloaded or reloaded the upper pin chambers on an Almont padlock. It seemed unusually complicated. After doing it just a few times, I found it to

be surprisingly easy. I must warn you that this lock can give you problems if you are very careless. If you learn the proper procedures, though, I think you'll find the Almont "Re-Key" to be both fast and easy to service.

For more information, contact: Almont Lock Co., Inc., 113 School St., Almont, MI 48003. Phone: (810) 798-8950. **TNL**



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1995

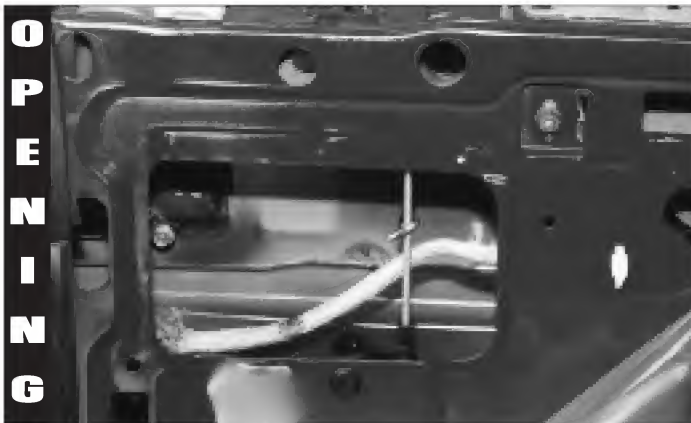
The Chrysler Le Baron



by
Michael Hyde



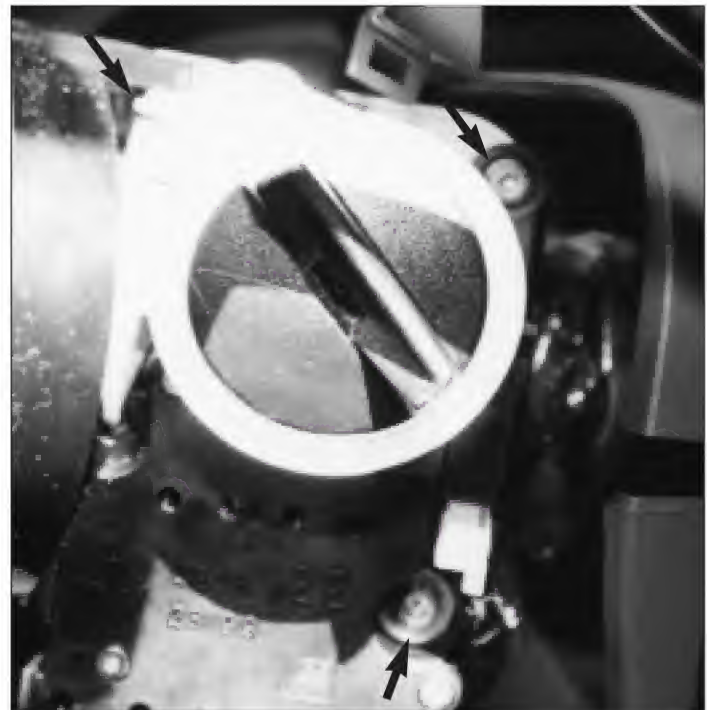
1. The 1995 Chrysler Le Baron had some changes in store for the automotive locksmith. Chrysler made the changes to the ignition because of car thefts. The Le Baron is popular with rental car fleets as well as car thieves.



2. This is an easy car to open, it has a vertical linkage that is not shielded. I used the Z-Tool from Slide Lock Tool Co. to open the door. Use wedges and a light, if necessary.



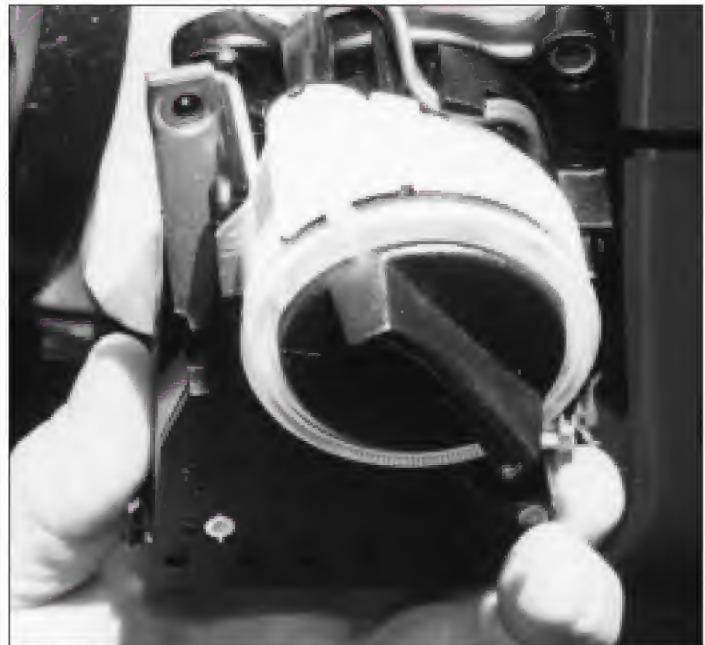
3. To remove the ignition, you do not have to remove the steering wheel or airbag.



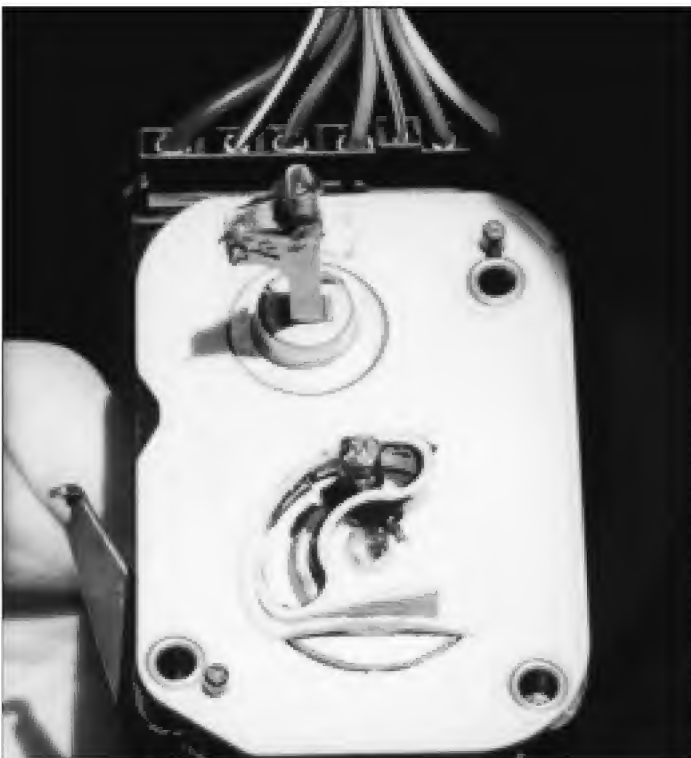
4. It is necessary, however, to first disconnect the battery. Next remove the three T15 Torx screws that hold the column plastic clam shell shroud together, then unsnap the shroud halves and remove. To remove the ignition cylinder on this car you will have to remove the ignition/electrical switch assembly as one unit. The reason you have to remove both is because of Chrysler's new anti-theft security plate. Chrysler has replaced the active tension pin with a security Torx and steel plate. To remove the assembly you will have to remove the three T15 security Torx screws that hold it to the column.



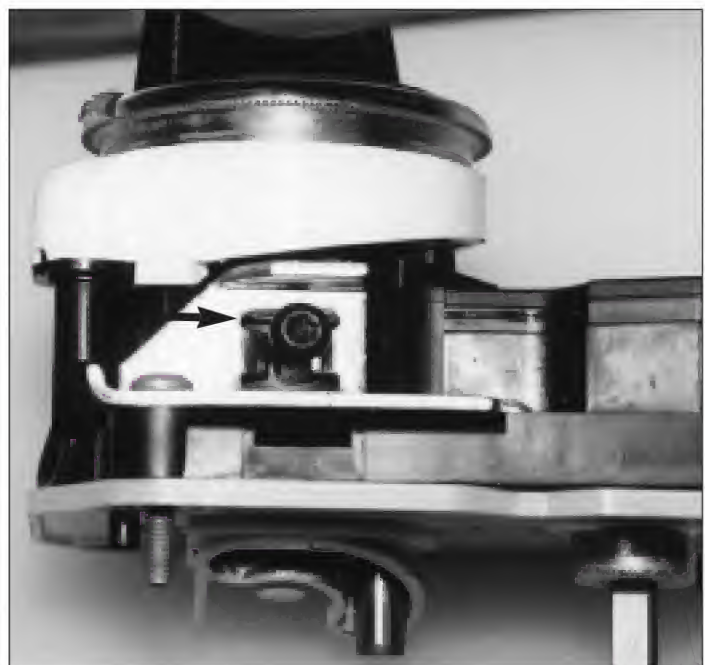
5. The difference between a security Torx and a regular Torx is that on a security Torx there is a post in the middle of the head of the screw, preventing a regular Torx driver from entering. (NOTE: Do not have the working key in the ignition cylinder until it has been completely removed from the car.)



6. After you remove the screws the security plate will fall away from the column.



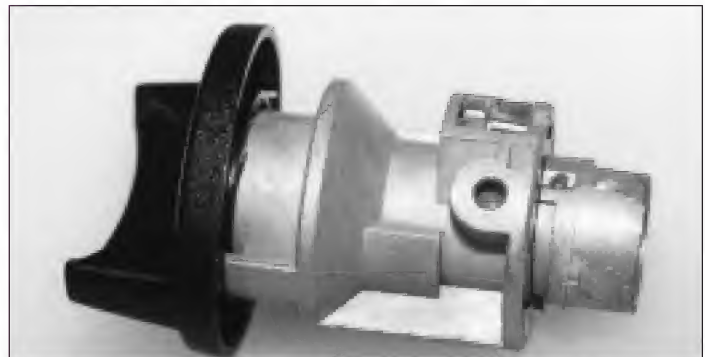
7. Next unplug the wiring connectors to remove the assembly from the car.



8. Once the unit is removed from the car, remove the black security Torx screw that secures the cylinder to the electrical switch unit.



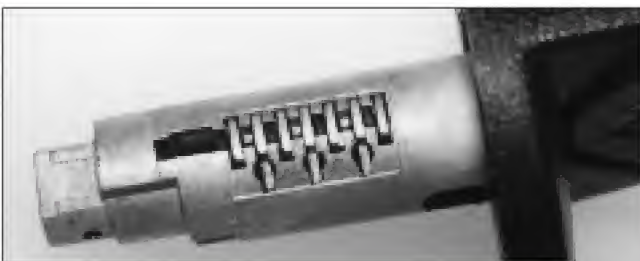
9. Insert the working key while maintaining slight pulling pressure, rotate the cylinder plug to the ON position and then rotate it back to the OFF position. Remove the key and the cylinder should slide right out.



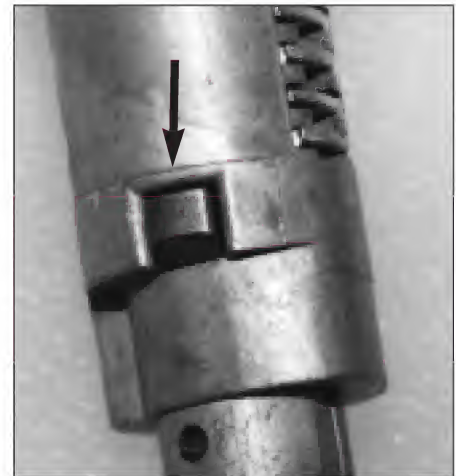
10. The ignition lock cylinder is pictured .



11. It is much easier to use a new lock service package instead of rekeying the original ignition lock. The factory lock has a tailpiece that is pressed on, and is difficult to service properly. The service package is Strattec #702788 and costs about \$12.00.

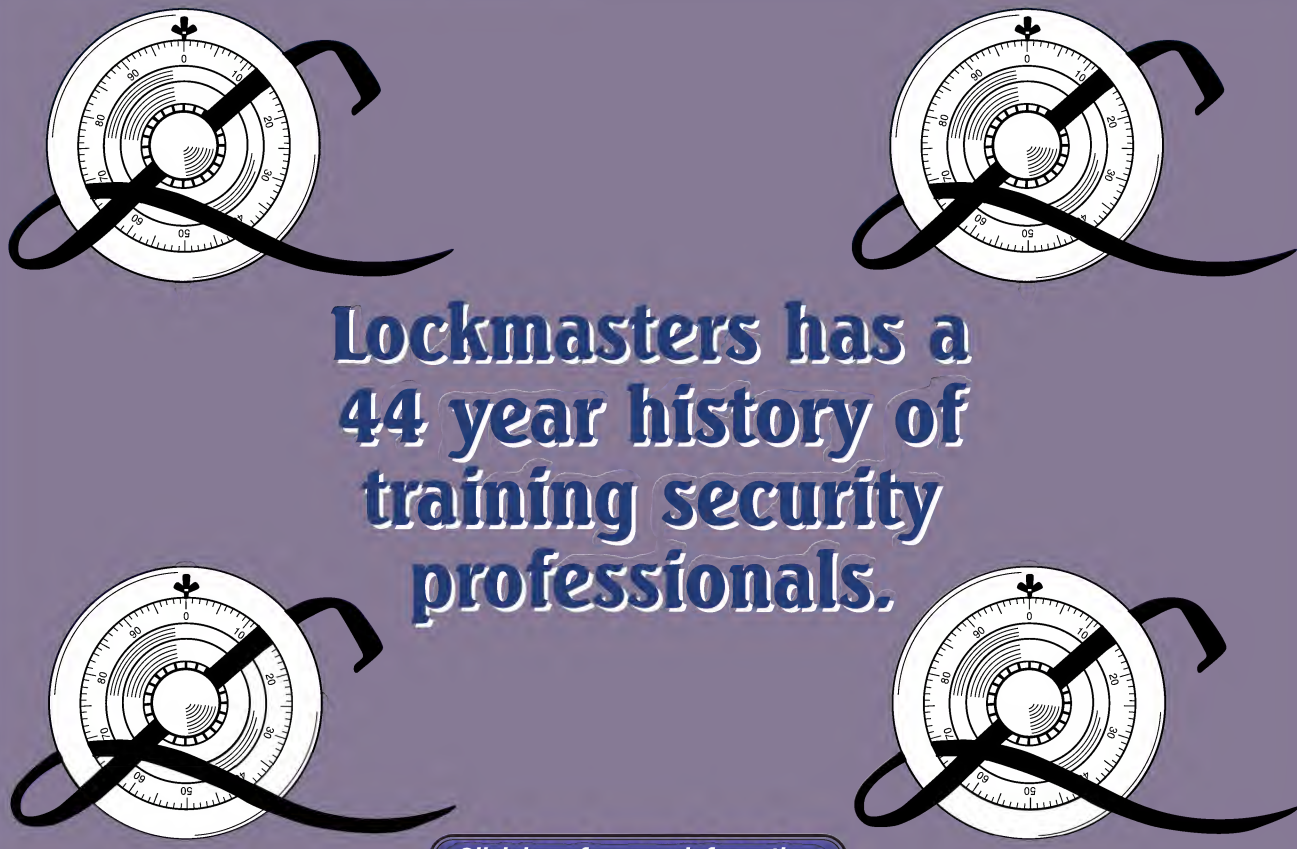


12. The ignition cylinder plug contains all seven tumblers used in the car.



13. There is a small metal buzzer part that must go in the rear section of the plug. It is somewhat difficult to figure which position it goes in. Make sure you insert the part so the slope on the top of it points toward the rear of the plug. Before you assemble the unit don't forget to put in the spring and guide pin on the front of the housing, use a little grease to ease its operation. When assembling the plug into the housing, the plug may get trapped by the buzzer activator in the cylinder housing. If this happens, use a small flat bladed screwdriver to lift the buzzer activator out of the way.

Continued on page 32



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Continued from page 29



14. A roll pin holds the tailpiece to the back of the plug. To reinstall the ignition cylinder, slide the cylinder in while maintaining light pushing pressure, then insert the key and rotate to the ON position and then rotate back to the OFF position. Now reinstall the security Torx, to secure the cylinder from coming out. Before you reinstall the unit into the car, remove the key from the lock. The ignition/electrical switch assembly has two guide posts to help line it back up to the column. Take your time lining it up, as it may take a couple of minutes to place it in the same position that it came off. Remember not to have the key in it while lining it up.



15. The door panel needs to be removed to service the door lock.



16. First remove the inside door release trim piece by removing the one Phillips head screw.



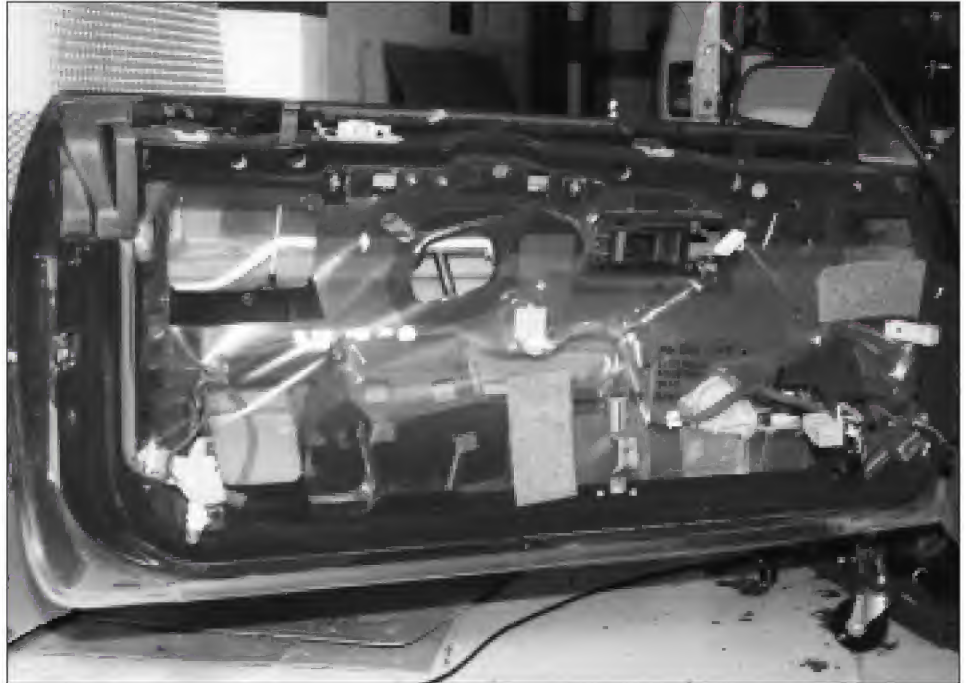
17. Push the trim piece forward and then disconnect the wiring connector.



18. Remove the cloth trim piece in the armrest cavity and then unscrew and remove the single Phillips head screw .



19. Next, unsnap the speaker cover and remove. The cover is located on the forward lower section of the door. There is one Phillips head screw located under the speaker cover that needs to be removed.

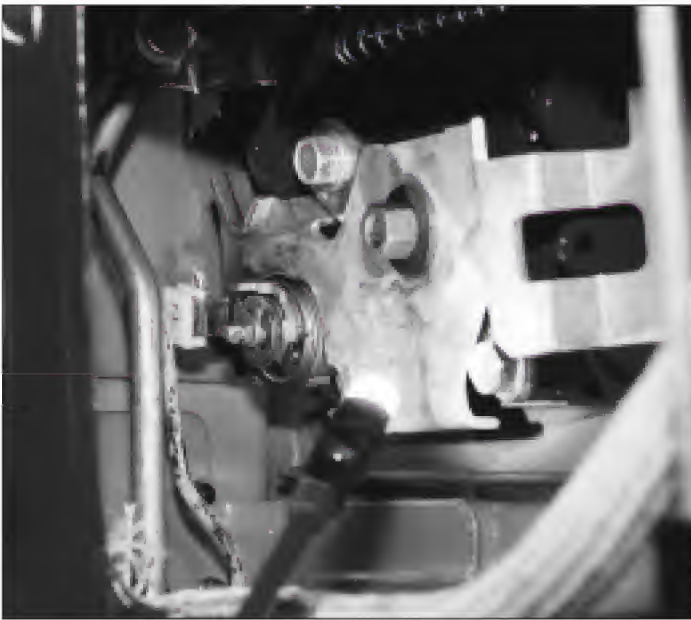


20. You can now remove the door panel. Peel back the plastic protective film to access the inner door area .

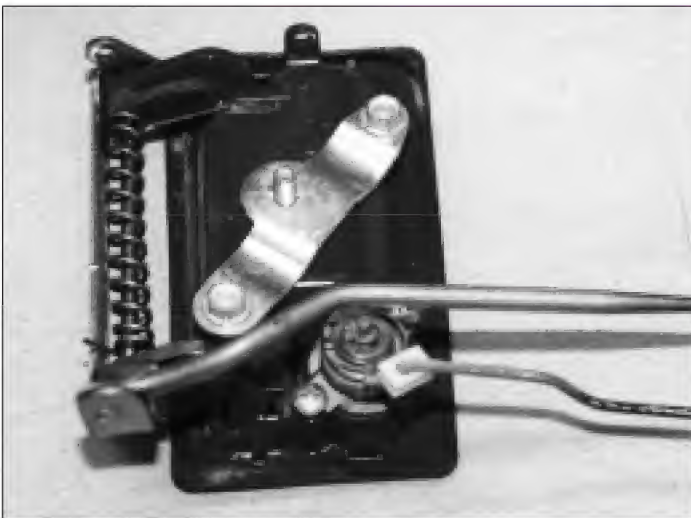


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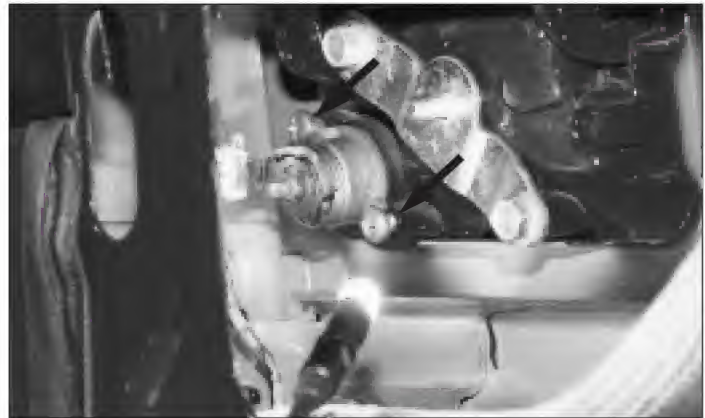
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21. To service the door lock cylinder it is easiest to remove the whole handle/lock assembly. The handle is held in place by a support plate. Remove the single 10mm nut and then the plate.



22. Next, disconnect the outside handle release linkage rod where it meets the latch mechanism. Disconnect the lock cylinder linkage rod at the latch also. They are held in place to the latch with the standard type plastic clips. Now the handle assembly can be easily removed from the car .



23. The lock is held to the handle by two Phillips head screws. Remove the screws, then pull the spacing block off the lock.



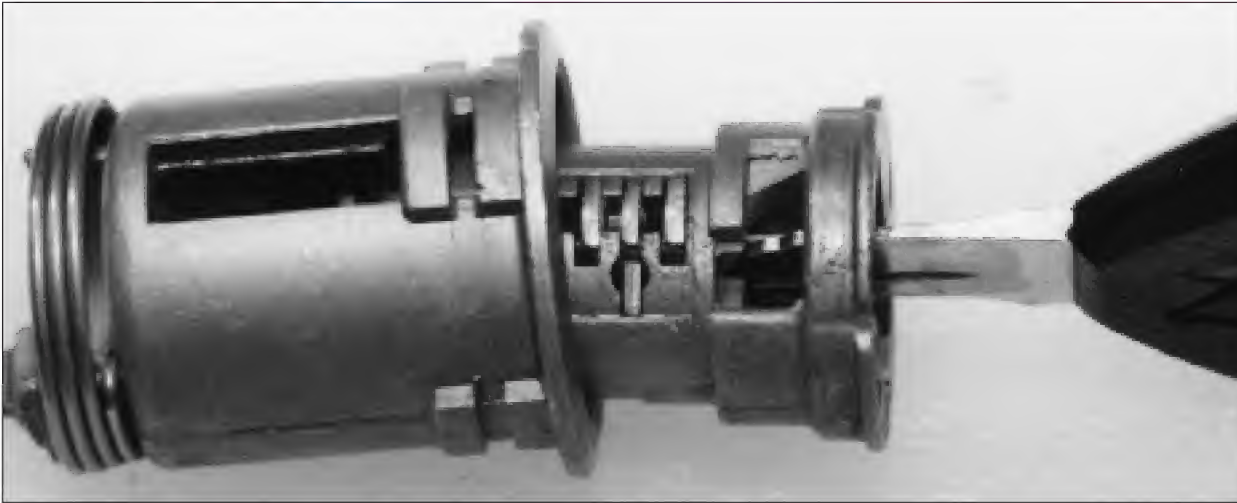
24. The tailpiece needs to be removed to disassemble the lock, it is held in place by an E clip

25. Remove the face cap and discard. Replacement with a new cap. Remember there are two small springs that sit under the shutter assembly .





Continued from page 34



26. Now slide the plug out of the cylinder housing.



27. The door cylinder plug has five tumblers in it, in positions 3 through 7.



28. The trunk lock sits under the taillight assembly which needs to be removed to service the trunk lock.



29. There are ten 10mm nuts that hold the light assembly in place. Remove the bolts, disconnect the two taillight lamps, and remove the assembly.



30. The lock is held to the trunk lid by three 11mm nuts, remove them and take off the lock. The lock cylinder is mounted in a metal housing. There is a large tension pin that holds the cylinder to the housing. The roll pin is inserted in a one way hole. What I did was to drill a 1/8" hole above the pin and use a pin punch to force the pin out the other end of the hole.



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31. Next, remove the tailpiece and spring, but remember how it goes back together. Remove the face cap and discard. Replace with a new cap. Remember there are two small springs that sit under the shutter assembly. The trunk cylinder plug contains five tumblers, in positions 3 through 7.

GLOVE BOX



32. The glove box lock is held in place by a plastic horseshoe clip, similar to the squeeze type used in GM products.

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33. The plug is held in place by two small plastic tabs on the rear of the lock. I use a small screwdriver to work the tabs out a little to slide the plug out the front. The glove box cylinder plug has three tumblers in it, in positions 5, 6, and 7.

Making First Key

Method One: Use H. E. Mitchell's EEZ Reader in the door to obtain cuts in positions 3 through 7 and then use reader in ignition to get the two remaining cuts in positions 1 and 2 for a complete key.

1995 Chrysler LeBaron

Code Series: L00013580

Key Blank: Ilco Y157,
Silca CY22

HPC 1200CM: CX60

MACS: 2

First Cut: .297"

FRAMON: Use Ford 5 pin clip
and set for first cut @ .052.

Cut to Cut: .092"

Depths: 1-.340", 2-.315",
3-.290", 4-.265"

Method Two:

Disassemble door or trunk lock to obtain cuts in positions 3 through 7 and then progression remaining cuts 1 and 2 for a complete key.

NOTE: I do not recommend impressing these locks as the tumblers are prone to breaking when forced. **TNL**

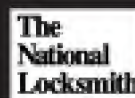
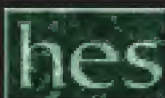


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BEGINNER'S CORNER

The Master Lock One Key System.



by
**Jim
Langston**



I want to introduce you to a whole new way to key Master padlocks. The "Master Lock One Key System" offers a unique new way to key new padlocks to existing keys. It is designed to allow quick keyed alike keying capabilities without the use of a pinning kit.

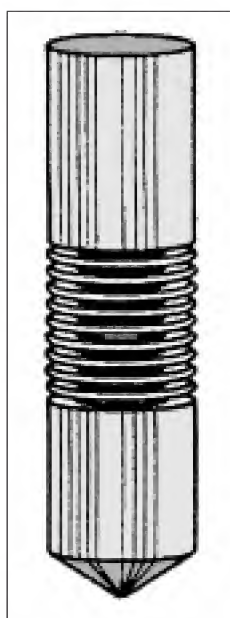
— A Revolutionary Design —

The Master Lock One Key System is a revolutionary advance in security products. In the past, if your customers wanted new locks to work with an existing key, they had to order them and wait for weeks, find a store with a huge padlock inventory to match the key or physically pull the cylinder and rekey the lock to match his existing key. Many people did neither. They just kept buying new locks and adding new keys and confusion to their key ring.

Master Lock has changed all that with the One Key System.

— The Settable Pin —

Master Lock developed what it calls a settable pin tumbler. It resembles an extra long serrated bottom pin (see Illustration A). All the pins are the same length which is about a half inch long. The purpose of the extra long length is because each



A. Master Lock developed what it calls a settable pin tumbler.



1. The rekeying fixture is designed to be fastened to a work bench.



2. The short shackle version of all three sizes is shown.

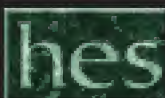
pin is actually two pins in one, a top or driver pin and a bottom pin. The pin is designed to shear at one of the serrated positions, then becoming a top pin and bottom pin.

— Keying Fixture —

The rekeying fixture is designed to be fastened to a work bench. Supplied with the rekeying fixture is a mat, which doubles as a mounting template for the fixture and instruction sheet (see Photograph 1).



3. The cylinder will protrude from the end of the lock before it is keyed.



4. Check the key against the outline on the mat template.

— Padlock Features —

The padlocks come in three different sizes, 3UP short shackle; 3UPLF long shackle; 1UP short shackle; 1UPLJ long shackle; 5UP short shackle; and 5UPLF long shackle. The short shackle version of all three sizes is shown in *Photograph 2*.

The Master Lock padlocks are supplied pre-loaded with the settable

pins. You will notice that the cylinder will protrude from the end of the lock before it is keyed (see *Photograph 3*). At this point, no key will operate the lock, not even a blank. To set a key to the lock, first determine that the key is a standard Master Lock M1 keyway. Use the customer's original key whenever possible. If you have any doubts, you can check the key against



5. Insert key into the padlock a couple of times.

the outline on the mat template for the jig (see *Photograph 4*).

— Fixture Operation —

To operate the Master Lock Pinning Fixture, the customer's key must be removed from any key rings.

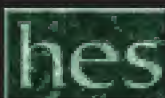
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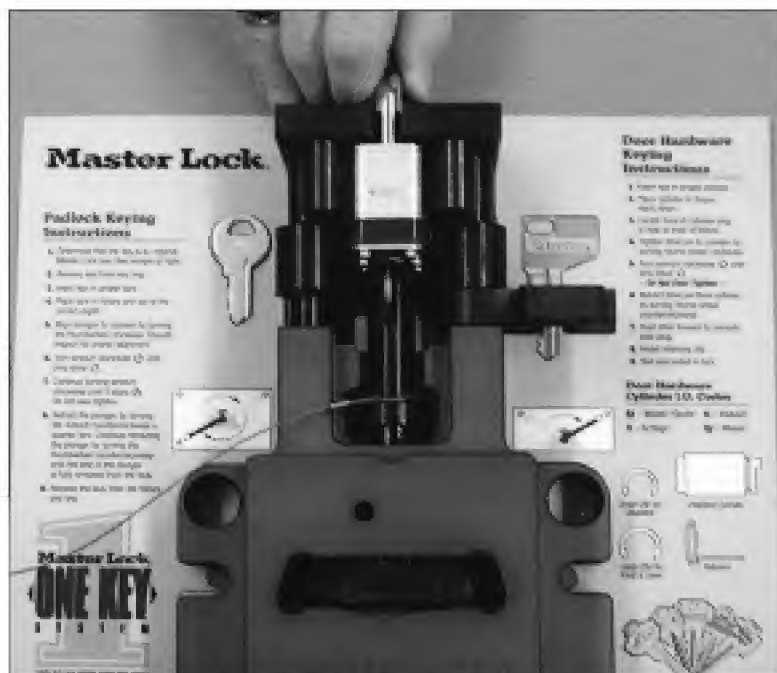
6. Turn the thumb wheel on the fixture counter clockwise to retract the plunger.

Before fitting the lock to the customers key, be certain that the customer has selected the right lock for their intended application. Once you set the lock to match the customers key it can't be changed again.

We'll use the Master Lock number 5UP with a standard shackle, the largest of the UP locks, for the following keying procedure.

— Keying Procedure —

1. Insert your customer's key into



7. Place the lock in the fixture with the shackle sticking out.

the padlock and remove it. Do this a couple of times. It cleans out any burrs that might be in the keyway (see Photograph 5).

If you stick the key in the lock and it doesn't come out easily, don't force

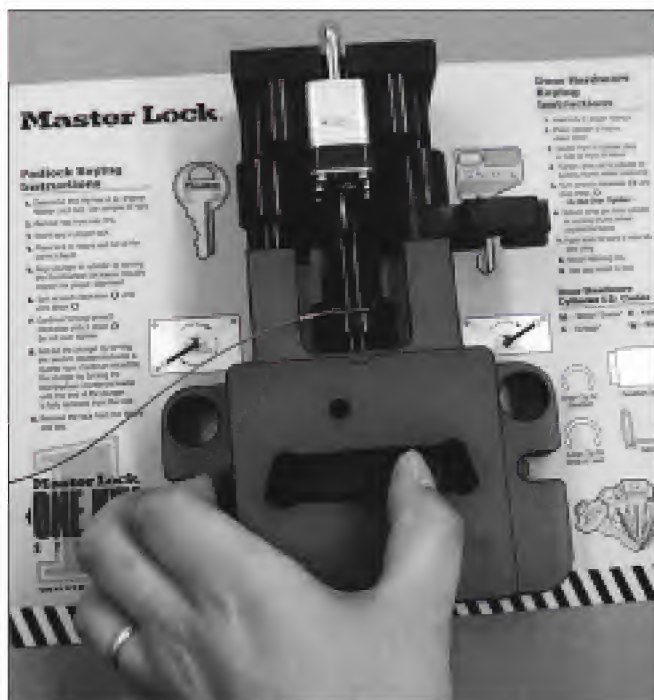
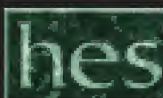


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8. Turn the thumb wheel clockwise to push the plunger against the padlock's cylinder.

it. Just wiggle the key back and forth and the key will slide out.

2. Next, turn the thumb wheel on the fixture counter clockwise to retract the plunger all the way (see Photograph 6).



9. Hold the wrench on the turn bolt with one hand and hold the other hand on the open end of the wrench.

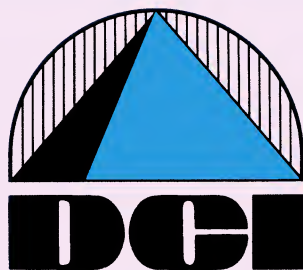
3. With the customer's key in the lock, place the lock in the fixture with the shackle sticking out of the front plate (see Photograph 7).

Once the lock is in the fixture, pull it by the top of the shackle so that it is firmly against the front plate. NOTE: The two pieces behind the front plate

are hinged to accept the UP series locks.

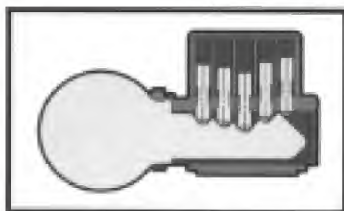
4. Next turn the thumb wheel clockwise to push the plunger against the padlock's cylinder on the bottom of the lock (see Photograph 8). Be sure to check alignment of the plunger to the plug.

NOTE: Do not over-tighten during this procedure, you're only aligning

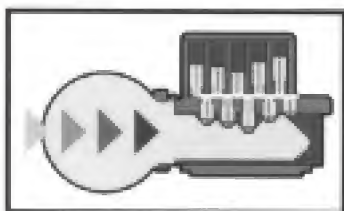


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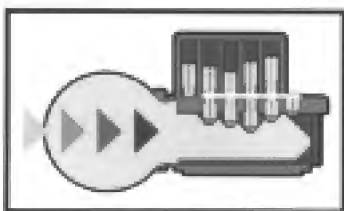
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Insert key into padlock cylinder.



Using the fixture, push the plug into the cylinder to shear the pins.



Continue pushing the plug into lock body. Padlock is now custom keyed.

B. The keying progression can be seen.



10. After the keying procedure, the cylinder face is now flush with the lock.

the padlock and the plunger at this point.

5. Next attach the wrench to the turn bolt at the back of the fixture so that the open end points to the 9 o'clock position. Hold the wrench on the turn bolt with one hand and hold the other hand on the open end of the wrench (see Photograph 9). Now turn the wrench clockwise in a quick even rotation.

NOTE: You will "feel" the fixture "break" the pins inside the padlock cylinder. Keep turning the wrench in the clockwise direction until you run into resistance, but do not over-tighten. That is as far as you go.

The keying progression can be seen in *Illustration B*.

To remove the lock from the fixture, bring the wrench around counterclockwise to retract the plunger. The turning procedure will become easy. When this happens, remove the wrench and finish retracting the plunger using the thumb wheel. The newly keyed padlock can now be pulled out of the fixture.

Turn the key in the lock several times in both directions to loosen it up for a smoother operation. You will notice that after the keying procedure, the cylinder face is now flush with the lock (see Photograph 10).

— Conclusion —

This method of keying Master padlocks is remarkably fast and easy. The samples I tested operated quite smoothly. This same keying system is also available on Master Lock cylindrical door lock cylinders as well.

For more information on the Master Lock One Key System call: (414) 444-2800.



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Locknetics Stands Alone

W I T H T H E

CM5400



by
Steve Gebbia, CML

Locknetics has long been known as a leader in electronic and electro-mechanical lock technology. They have taken a major step forward with the introduction of the revised and updated CM5000 and CM5400 series electro-mechanical locks.

The CM 5000 series is a heavy-duty cylindrical lever set. The CM 5400 series is a Grade 1 mortise lock. Both of these are microprocessor controlled access control systems. They contain all the features you could ask for in an access control system - packed into a stand-alone lockset.

Since the features of each are exactly the same, this article will concentrate on the CM 5467 mortise lockset (see Photograph 1).

This is an entrance function lock - with deadbolt. In normal operation, this unit functions as a storeroom lockset. For added security, the deadbolt can be thrown with the interior thumbturn or the mechanical override key. The deadbolt can be retracted by the keypad, touch reader, or mechanical key. By programming in a "toggle" code, the lock can be left in the unlocked position until the same (or another) toggle code is entered.

The keypad has five stainless steel buttons on a die-cast zinc cover assembly. The interior electronics cover is made of Lexan. A black powder coat finish is standard for both inside and outside housings. The levers are available in satin bronze (612), satin chrome (626), polished brass (605), dark bronze (613), or bright chrome (625).

Power is supplied by four AA style alkaline batteries (included). Battery life is estimated at 80,000 cycles. System memory is maintained in non-volatile EEPROM memory. The optional audit chip is also non-volatile EEPROM memory.



1. The Locknetics CM5467 mortise lockset.



2. The first step is to remove the existing lockset and trim.

The exterior lever has a clutch action that allows it to rotate freely when locked. The interior lever, of course, always allows free egress.

The Touch-Entry reader is rather unusual. Instead of a round receptacle to receive the touch chip, there are two terminals. The touch chip is placed on the left terminal and the side of the chip touches the right terminal to complete the "circuit."

These terminals serve two additional purposes. This is where the remote devices are connected to program the lockset. An added feature is that a voltmeter can be used to read the battery voltage here as well. Simply set the meter to a DC scale above 6 volts, plug the meter into the terminals and read the voltage. If the meter reads below 4.5 volts, the batteries should be replaced. Fresh batteries should read slightly over 6 volts.

Up to 150 users can be programmed into the system. Each can be assigned a Keypad Code (PIN), a TEK (Touch-Entry Key), or both. Care should be taken when selecting each user's entry option.

One highly recommended option is the audit trail (specified by suffixing ATR after the model number). This allows you to download an audit trail of the last 100 events. As the system passes the 100 event limit, it automatically rolls forward to maintain the log. This is to say that as event 101 is reached, event number 1 is deleted and number 101 is added. This keeps the audit log current to the last 100 events. As an audit is taken, it remains in the lock's memory and is read by the programming computer.

While there are many ways to program the lock, to make full use of the lock's features a laptop computer or the optional palmtop PC is recommended. Locknetics' LockTrak software provides full system management for their entire line of access control products. This allows you to integrate a stand-alone lock into a new or existing access control system.

INSTALLING THE CM5467

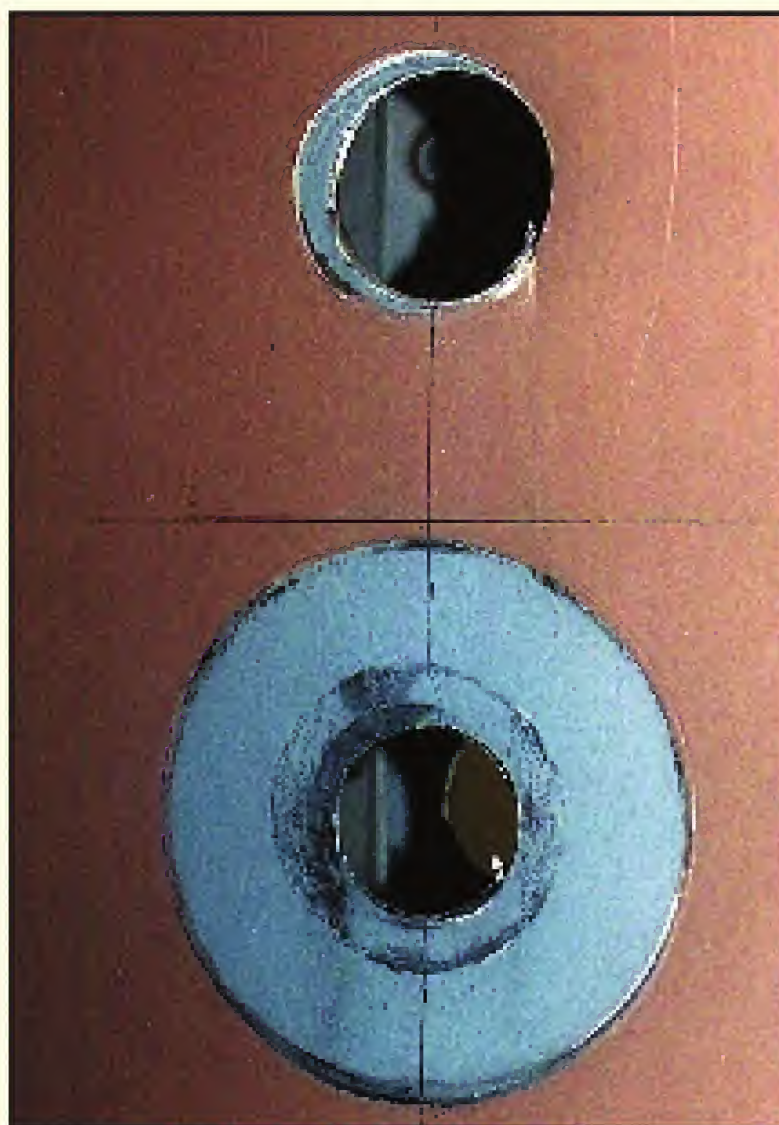
The CM 5400 series is designed to replace existing Grade 1 commercial mortise locksets. While the lock body is custom made specifically for Locknetics, it is based on Russwin lock dimensions. However, it can be installed to replace almost any full mortise lockset. The inner and outer escutcheons are large enough to cover most existing mounting holes.

Be aware that the outer trim extends well above that of a standard mortise lock. Allow several inches clearance above the lock - at least 5 inches as measured from the center of the cylinder.

This lock is factory handed and should be ordered in the proper handing. Unless otherwise specified, it will be shipped RH standard swing.

The installation shown here is replacing a Sargent 8104 on a steel door. To allow this lock to fit, the spindle holes will need to be enlarged. New holes will be located and drilled for the upper and lower through-bolts, wiring pass-through, and deadbolt actuator.

The first step is, of course, to remove the existing lockset and trim (see Photograph 2). Then locate all mounting holes.



3. In this installation, the cylinder hole was in the proper location, so all measurements were taken from there.



4. To protect the wires as they pass through the door, place tape around the wiring hole.

Be very careful here. All dimensions are measured from the centerline of the spindle hub - not the centerline of the lock case. In this installation, the cylinder hole was in the proper location, so all measurements were taken from there (see Photograph 3).

Unfortunately, there are some errors in the instructions. Also, the only drawing that contained dimensions had been reduced from a full page down to less than 1/4 page. This made it very difficult to read.

I have spoken with the folks at Locknetics and was assured that the installation manual is in the process of being rewritten.

Don't let this relatively minor problem stop you from using an otherwise excellent product. After all, most experienced installers will verify every dimension against the lockset itself before marking and drilling the door.

Once all holes have been located and drilled, install the lock body. Leave the mounting screws slightly loose for now. To protect the wires as they pass through the door, place tape around the wiring hole (see Photograph 4).

Now, the spindle can be installed. The spindle is actually 3 separate pieces. The outer spindle consists of two parts: a short half with a hole in its center, and a longer half with a pin located on the end of it. The inner spindle is a single, longer, solid part. Take the short spindle with the hole in it and place it in the lock hub. It will only insert one way - on the "diamond" (see Photograph 5). This is very short so don't drop it into the door!

Before installing the rest of the outer spindle, the trim must be properly "timed." Simply align the timing mark on the hub at the "6:00" position (see Photograph 6).

Now insert the other half of the spindle (with the pin) into the outer trim (see Photograph 7). The pin will mate with the hole in the short half of the spindle.

This next step is the trickiest in the whole installation. If your holes are drilled accurately and you are patient, it will go much easier. The spindles fit into the hubs with very little play so there is little tolerance for incorrectly located holes.

Start by carefully passing the wires through the door. Then install the outer housing - taking up any slack in the wires as you go. The housing will not yet touch the door. Making sure the spindles are aligned properly, press firmly against the outer housing to fully seat it. A medium pressure is all that should be needed. Do not use excessive force! The idea here is to fully seat the two halves of the spindle. The short half will press the longer half fully into the outer lever if done properly. It will help if you use your free hand to steady the lock body (through the inner spindle hole). More than likely, this will take you several tries to fully seat. Don't worry, once past this point, you're home free!

Moving to the inside of the door, attach the electronics assembly. Be sure to pass the wires through the notch at the top of the mounting plate (see Photograph 8). The deadbolt actuator (located between the batteries) will help you align this assembly properly. (Models without a deadbolt have an alignment tool that inserts at this location).

The lower mounting holes are elongated to ease installation and prevent binding (see Photograph 9). Again, leave the mounting screws slightly loose. This lock has very tight working tolerances between the various components. Leaving everything loose until later will make your job much easier.



5. Take the short spindle with the hole in it and place it in the lock hub.

Continued from page 48

Install the inner spindle and then install the inside lever and cover assembly. Use the spanner head screws provided with the lock. Make sure it seats fully, but leave the cover slightly loose for now. If it doesn't seat fully, chances are the outside spindle isn't fully seated.

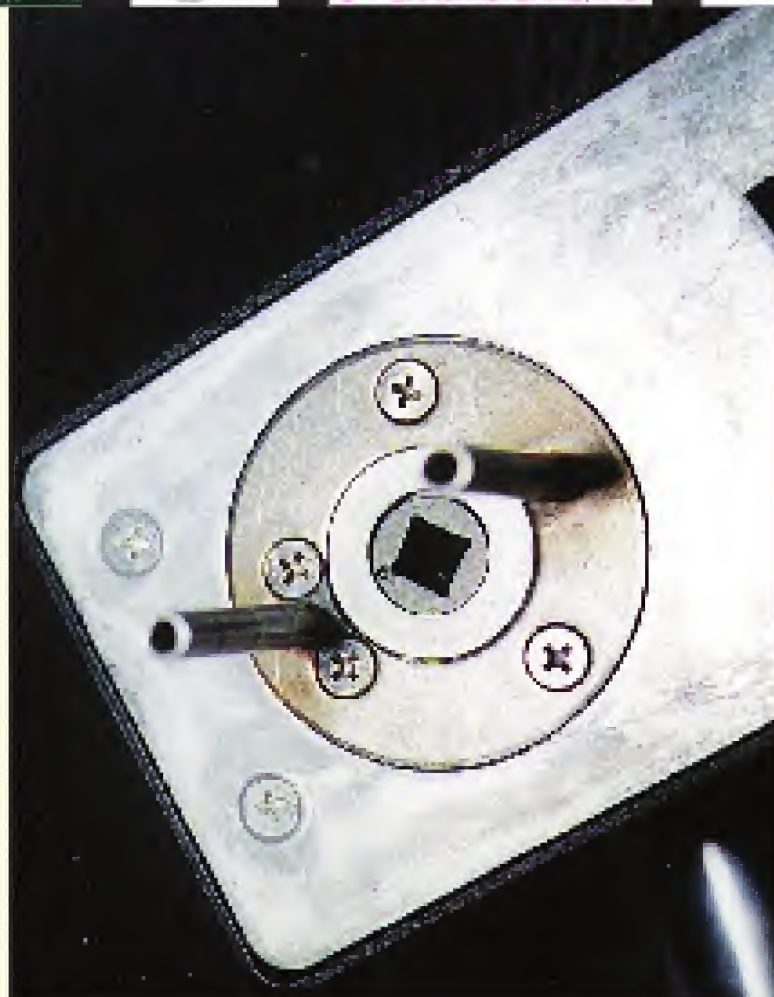
Go ahead and install the mortise cylinder now. Make sure it has a Russwin-style cloverleaf cam. For security, the cylinder is recessed into the outer escutcheon. This is a high-security lock. You should use a high-security cylinder, but be careful. The escutcheon will interfere with many keys with large bows. Keep this in mind when selecting the cylinder you will use. Check the operation of the cylinder.

Now that the cylinder is in and working smoothly, go ahead and tighten the mounting screws. Except for the inside lever and cover assembly. This must be left loose until the top half of the electronics cover is installed.

It's time to plug it all in. There are three connections that must be made: the keypad, the motor, and the battery pack. Start with the keypad. This is the larger connector that passes through the door. It plugs into the connector located at the top right corner of the circuit board.

Next up is the motor wire. This is the smaller wire that passes through the door. It plugs into the connector located on the lower right corner of the circuit board - just above the batteries. Lastly, plug in the battery pack. This is located at the bottom center of the board (see Photograph 10).

Before attaching the electronics cover, test for proper operation. Each CM 5400 comes from the factory with 3 codes preprogrammed. "1-3-5-7-9" is the factory user code. "1-3-5-1-3-5" is the factory toggle code. "9-1-1-5" is the factory lockout code.



6. Before installing the rest of the outer spindle, the trim must be properly "timed."



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Enter the user code "1-3-5-7-9". The green LED will flash and the outside lever will be unlocked for the 8 second unlock delay time.

By entering "1-3-5-1-3-5," the green LED will light for one second and the outside lever will unlock until the toggle code is re-entered.

Enter "9-1-1-5". The red and green LEDs will alternate to indicate the code was accepted. The lock will remain locked. The user code and the toggle code will not operate until the lockout code is entered again. If a user code is entered, the red LED will flash twelve times - the lock will not unlock.

All TEKs must be programmed into the lock, so you will not be able to test the touch reader at this point.

Attach the electronics cover by carefully slipping the bottom of it under the interior lever cover (see Photograph 11). Make sure the thumb-turn engages the deadbolt actuator. Tighten all cover screws. Install the strike plate.

Once again, test the operation of the deadbolt from both sides of the door.

Once you are satisfied with the operation of the CM 5400, you can proceed to programming your lock.

It may seem like a long, difficult process to install this lock, but it's not. This particular installation is probably the most difficult replacement of an existing lock you will encounter. This was on a commercial steel door, replacing a lock with different hole locations. Even so, the lock was installed and ready to program in less than an hour.

Programming the Locknetics CM5400

Locknetics computer managed access control lock - the CM 5000/ CM 5400 allows several options for programming.

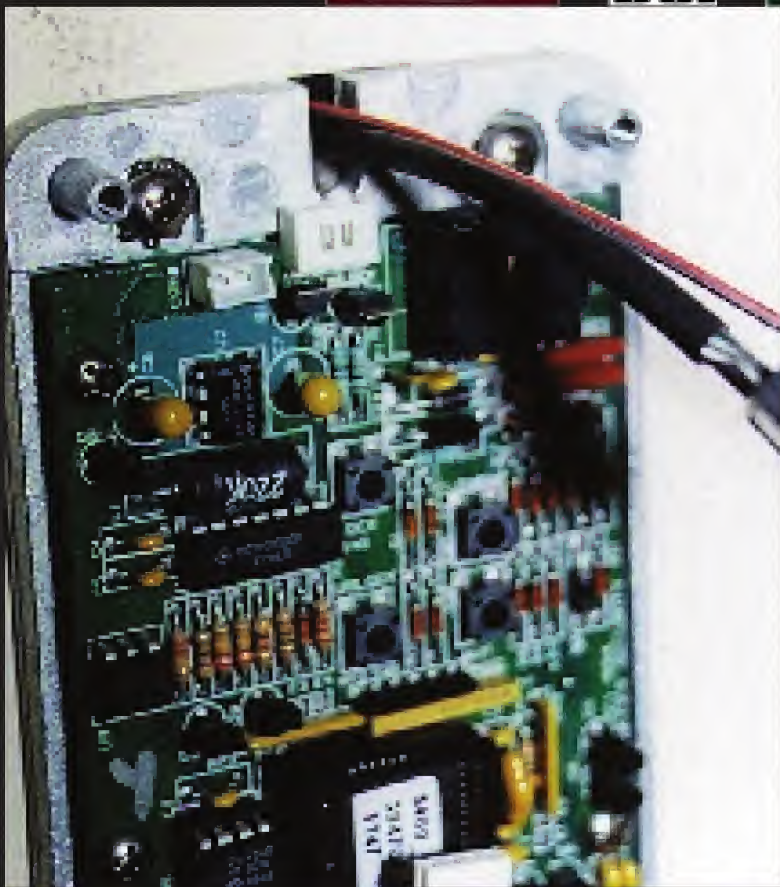


7. Insert the other half of the spindle (with the pin) into the outer trim.

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8. Be sure to pass the wires through the notch at the top of the mounting plate.

Which method you choose will depend on the size of your system, whether there are TEKs (Touch-Entry Keys) present, who will program the system (and maintain records), how often changes will be needed, and your customer's budget. In order to make use of the optional Audit Trail, you must use one of the computer-based programming options.

Your choices for programming are:

- manual programming at the keypad (for keypad codes only)
- using the TEP-1 (for TEKs only)
- using the TEP-2
- using the Computer Interface Pack (CIP) with your laptop computer
- using the TEP-3 palmtop PC

All computer-based options use the LockTrak software for programming. This is an easy to use program that runs on DOS or Windows 95. Under Windows 95, it actually runs in a DOS window, so you may want to run it straight from DOS. This software is used for all of Locknetics access control products. Because of this, there are some options that will not be available for use with the CM products.

Codes, Codes, and more Codes

Codes may be from 3-8 digits in length. Unlike many other systems, all codes in the system do not have to be the same length. This will allow you greater flexibility in selecting and assigning codes. If you choose a manual programming method, be sure not to use the same code twice.

A total of 150 codes may be used. However, this total includes both keypad codes and TEKs.

Each code, whether PIN or TEK, may be programmed as one of 5 code types:

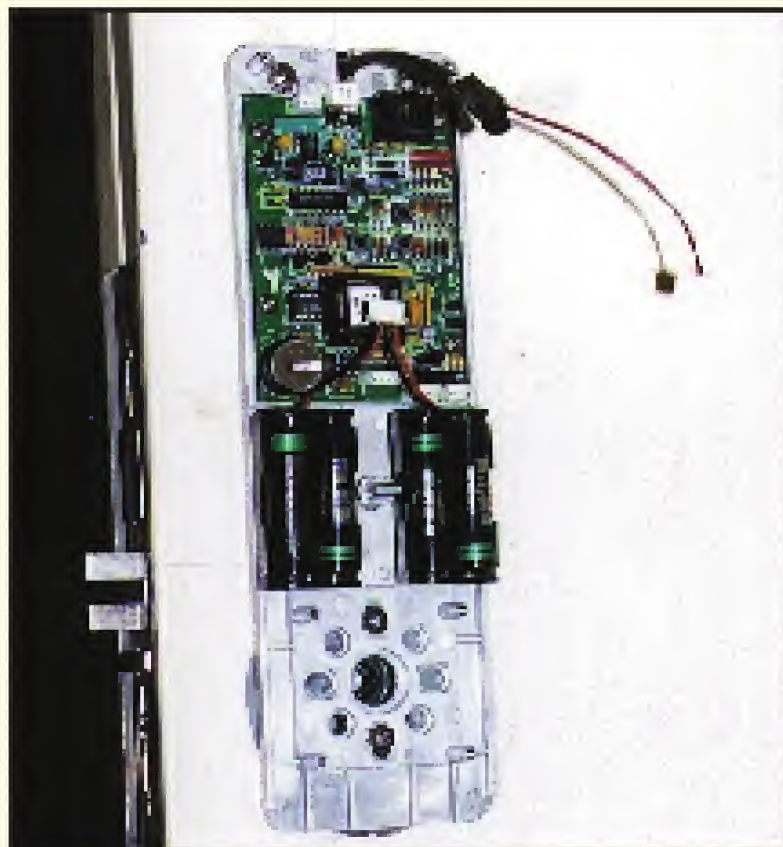
- Master Code - Only one allowed per system. May be either PIN or TEK.
- User Code - Momentarily releases the lockset. Length of unlock delay is programmable.
- Toggle Code - Releases the lockset and leaves it unlocked until the same or another Toggle Code is entered
- Lockout Code - Will disable all User Codes. Does not release the lockset. Any Lockout Code will reset the lock. A Lockout Code is required to reset a lock that is in automatic lockout mode due to weak batteries.
- Single Use Code - This User Code allows one time, momentary access and then automatically deletes itself from the system.
- Double Use Code - When used with another Double Use Code, it will momentarily release the lockset.

Manual Programming at the Keypad

Keypad Codes (PINs) may be programmed directly from the keypad without use of any external device. TEKs require the use of auxiliary programmers.

The first step in any programming method is to change the Master Code. Manual programming is a 4 step process.

- First, enter program mode by entering existing Master Code.
- Next, choose your program command (such as: add User Code).
- Third, enter new code, and exit program mode. The new Master Code must be entered twice (for verification), all others only need be entered once.



9. The lower mounting holes are elongated to ease installation and prevent binding.



Continued from page 52

10. Plug in the battery pack located at the bottom center of the board.

Here is a list of the Program Commands:

Enter: {1}For: {Change User Code}
 Enter: {3}For: {Add User Code}
 Enter: {5}For: {Delete User}
 Enter: {99}For: {Program Relock Time (delay) }
 Enter: {55}For: {Delete User and notify Audit Trail}
 Enter: {33 * 191}For: {Add Toggle Code}
 Enter: {33 * 115}For: {Add Lockout Code}
 Enter: {33 * 113}For: {Add Single Use Code}
 Enter: {33 * 117}For: {Add Double Use Code}

Using these program commands and the easy-to-follow instructions, all PINs can be quickly programmed directly at the keypad.

Using the TEP-1

Touch-Entry Programmer TEP-1 allows you to economically program TEK's for a small system. The TEP-1 is a flexible card with 6 pre-programmed TEKs attached. Each TEK performs a specific function - such as {add TEK} (see Photograph 12).

While this is a viable method for programming a few Touch-Entry Keys, it can get tedious for larger systems. If you have more than a few TEK's in your system, you'll probably want to use a more advanced method of programming.

Programmer TEP-2

This programmer is ideal for medium-sized systems. It consists of a hand-held keypad with a Touch-Entry Reader

(see Photograph 13). This allows programming of both PIN's and TEK's.

Simply plug the wire leads into the terminals on the CM series lock. All programming commands are entered via the TEP-2. Just follow the steps used for manual programming at the keypad.

LockTrak Software

All keypads and touch readers from Locknetics - whether CM 5000/ CM 5400 series or not - can now be controlled from one software program. This program is called LockTrak and is available only from Locknetics. It runs best under DOS, but can be run from Windows 95 as well. When used to program and maintain the Computer Managed locks (CM series), certain options will not be available to you although they will appear in the menus as you proceed.

Most of these options are in the User Menu, under the heading Access Type. They include: Evening Only Access, Daytime Only Access, and 770/ 780/ 790 Relay. These options are used with other Locknetics products. And remember that although the CM 5400 has an internal clock, it is used exclusively for "time-stamping" the audit trail.

The LockTrak software is a menu driven program. Simply move from one menu to the next to program your system. This is highly intuitive and very easy to use - with very few surprises in store for the novice. You can navigate through this program very quickly using the ESC, ENTER, & Arrow Keys on your computer.

The program creates a file of User Data the first time it is run. This file is created automatically for the first building that you name. If you add a second building to your system,



11. Attach the electronics cover by carefully slipping the bottom under the interior lever cover.



12. The TEP-1 is a flexible card with 6 pre-programmed TEKs attached.

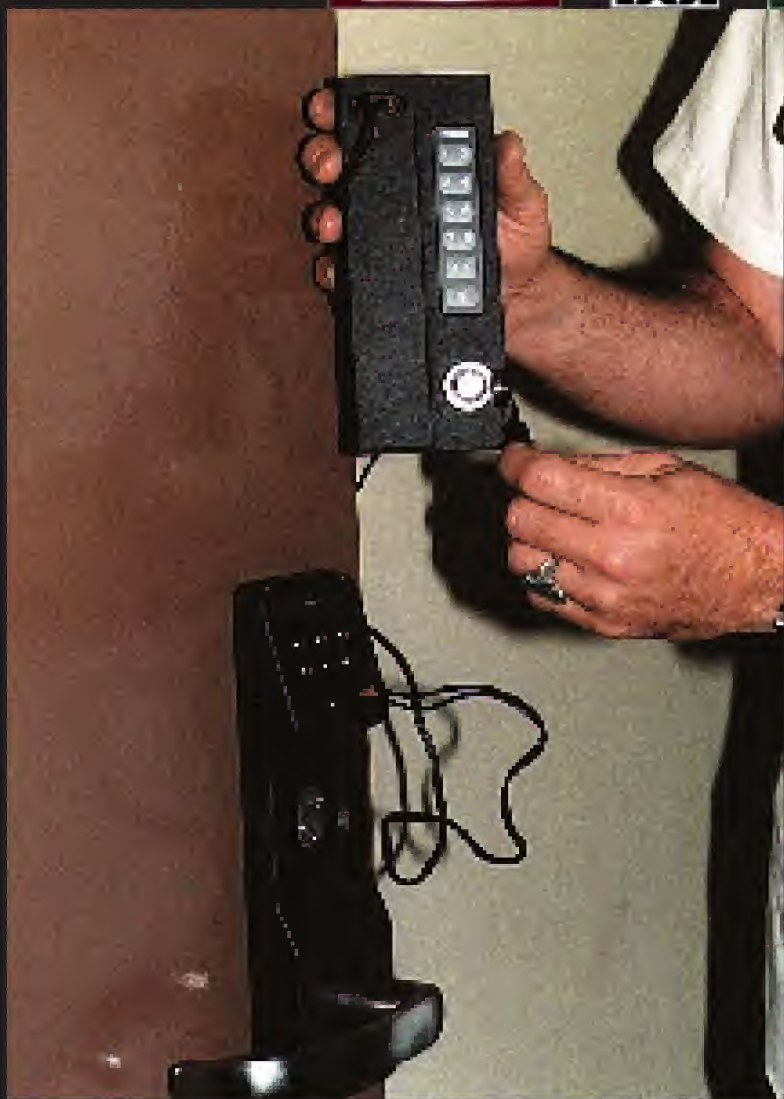
you must create a new User file for the Users in the new building. The software does not do this for you.

The first time you use the software, you will want to go directly to Menu Option #8 - Preferences (see Illustration A).



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13. The TEP-2 programmer consists of a hand-held keypad with a Touch-Entry Reader.

The COM and PRINTER options will be determined by your computer's configuration. For the CM series locks, select "PIN not required" by placing an "X" in the proper box. The alternate option is used for a different series of keypad.

Here you may choose the method of PIN generation as well. Unless "Manual PIN generation" is X'd, the software

Com Ports		Printer		Preferences	
<input checked="" type="checkbox"/>	Com1	<input type="checkbox"/>	Com1	Lock Security	
<input type="checkbox"/>	Com2	<input type="checkbox"/>	Com2	<input checked="" type="checkbox"/> Disable Lock Manual Programming	
<input type="checkbox"/>	Com3	<input checked="" type="checkbox"/>	LPT1	<input type="checkbox"/> Enable Lock Manual Programming	
<input type="checkbox"/>	Com4	<input type="checkbox"/>	LPT2		
PIN Entry		PIN Generation		Data Security	
<input type="checkbox"/> PIN Required		<input checked="" type="checkbox"/> Manual PIN Entry		<input checked="" type="checkbox"/> Enable Password Checking	
<input checked="" type="checkbox"/> PIN Not Required		<input type="checkbox"/> Random PIN Length		<input type="checkbox"/> Disable Password Checking	
		<input type="checkbox"/> 3 Digit PIN's			
		<input type="checkbox"/> 4 Digit PIN's			
		<input type="checkbox"/> 5 Digit PIN's			
		<input type="checkbox"/> 6 Digit PIN's			
		<input type="checkbox"/> 7 Digit PIN's			
		<input type="checkbox"/> 8 Digit PIN's			
				Validate Time & Date	
				<input checked="" type="checkbox"/> Do Not Check Time Before Programming	
				<input type="checkbox"/> Check Time Before Programming	

A. The first time you use the software, you will want to go directly to Menu Option # 8.

will assign a random PIN for each User that requires one. This is done in the User Data menu.

It is highly recommended that you also select "Check Time Before Programming." This allows proper recording of the time on all audit reports. One of the nicest features is the ability to disable manual programming at the lock (for keypad codes). This prevents anyone who acquires the Master Code from reprogramming the system. If this option is selected, the lock may only be programmed with the LockTrak software.

TEP-3 or Laptop PC?

Programming may be accomplished with either the TEP-3 palmtop PC or your laptop computer. If using a laptop, you will need the Computer Interface Pack (CIP). This includes software (3.5" floppy), a communication cable, and a Touch Entry Key Reader (see Photograph 14).

The TEP-3 comes with the LockTrak software pre-loaded and ready to use. This also includes a key reader and communication cable as well as a connectivity pack that allows you to download data to a desktop PC (see Photograph 15). While it's a very workable PC, the keypad is quite small and any sizable amount of typing can get tedious quickly.

The CIP combined with your laptop seems to be the easiest way to program this system.

The LockTrak software allows you to maintain all system records at your secure PC. Since the records are not on site, this helps maintain the integrity of the system. Of course, you may opt to sell the software to your client - allowing them complete control over their own system. I don't



14. If using a laptop, you will need the Computer Interface Pack (CIP). This includes software (3.5" floppy), a communication cable, and a Touch Entry Key Reader.



15. The TEP-3 comes with the LockTrak software pre-loaded and ready to use. This also includes a key reader and communication cable as well as a connectivity pack that allows you to download data to a desktop PC.

recommend this, but, for large systems with very high turnover of Users, this may be more practical for the end user.

The CM 5000 and CM 5400 series locks are extremely versatile access control systems. Make no mistake about it - these are complete systems. All the options your customer needs or wants are built into a very nice stand-alone lockset. About the only options not available are remote, real-time monitoring and activation of a remote alarm. All this for less than the cost of a hard-wired access control system.

This is an excellent product that is relatively easy to install. It will more than adequately fill the needs of many of your customers. The next time you are looking for a small to medium-sized access control system, take a look at the CM 5000 & CM 5400. You won't be sorry.

For more information on Locknetics products, call:
(860) 584-9158 **TNL**



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BUSINESS BRIEFS

New Look at Mayflower

Mayflower Sales has adopted a new logo and corporate identity. Gone is the Pilgrim mascot that has been in use for nearly 80 years. "The new logo is contemporary and says more about what we do and who we are," says Paul Swetow, Vice President of Mayflower. "We're marketing know-how to a growing segment of professionals in the security industry, and we want our correspondence to convey that image."



Contact Mayflower at 800-221-2052. Or, visit their web site at <http://www.mlsales.com>.

Allstate Insurance Company Receives ALOA Endorsement

Allstate Insurance Company has earned the right to be the property and casualty carrier exclusively endorsed by ALOA. Allstate has expanded coverage offered through the Allstate Locksmith Insurance Program to include liability insurance for mobile locksmiths, broader property damage coverage, and an inland marine policy.

You can reach Allstate at the following number: 847-402-8196.



Knight Safe Mfg. Expands

Knight Safe Manufacturing is growing. In January, KNIGHT SAFE moved into their new manufacturing facility and headquarters in Upland California. Now they proudly announce the grand opening of their EAST COAST DISTRIBUTION CENTER where their full product line will be stocked

for immediate shipment to their middle and eastern dealers. It is located in Capitol Heights, Maryland and the toll free number is (888) 324-2498.

Lockmasters Course Schedule

Plan Ahead to Get the Training You Need! Call for Lockmasters' 1998 Resident Course Schedule. Resident courses include GSA, Advanced GSA Red Label, Fundamentals of Electricity, Electronic Access Control, Electronic Safe Lock Course, Professional Locksmithing, and a variety of safe classes. For a free copy of the 1998 Schedule or for information on course content, please call Lockmasters' Education Department at 1-800-654-0637 ext. 338.

The Napco Security Group Is On The Web

Napco Security Group is pleased to announce the highly anticipated arrival of its new web site: www.napcosecurity.com. Featuring on-line product catalogs for the NAPCO Security Systems, Alarm Lock and Excalibur Access Divisions, corporate NAPCO Group profile, "Napco Today" news, and more. The site gives instant 2-way access to the NAPCO Group 24 hours a day.



Securitron Breaks Ground on Building Expansion

Securitron Magnalock Corp. has broken ground on a major expansion of its

headquarters and manufacturing facilities in Sparks NV. The expansion will expand its existing facilities from 36,000 to 65,400 square feet with more than two-thirds of the expanded space for manufacturing and warehouse.

Stanley Commercial Names Senior Product Line Manager

Chris Sincock has been named to the position of Senior Product Line Marketing Manager for Stanley Commercial Hardware. Sincock will be responsible for coordinating all new marketing



activity associated with Stanley's sliding and folding hardware product lines. He will serve as the key contact working closely with Stanley engineering, manufacturing and sales organizations.

Safemasters Expands in New Jersey

The Safemasters Company, Inc. has purchased the assets of Alarm & Lock Services, a business located in Park Ridge, New Jersey. William St. Clair, the prior owner of Alarm & Lock Services has come on board with Safemasters as their manager of the North Jersey area.

Meilink and Hayman Unite

Meilink Safe Company and Hayman Safe Company are pleased to announce a strategic marketing alliance to bring an increased range of products to their dealers. This alliance, believed to be the first of its kind in the U.S. safe and lock industry, permits dealers to combine both Meilink and Hayman products on one order for quantity discounts and

freight allowances. Dealers will have one order point, one invoice, one shipment and receive the maximum discount available from either manufacturer.

Keys Wholesale

Keys Wholesale Distributors Inc. announces the release of its 20th anniversary illustrated catalogue. This 48 page catalogue illustrates a wide variety of key accessories, key machines and cutter wheels available for immediate shipment from their distribution center. Keys have grown in popularity recently because of their extremely broad offering of key blanks as well as their low order minimum of \$10.00 and the policy of No Freight Charges on orders over \$75.00.

Trine Issues New 48 Page Catalog

Trine Products Company has just released its latest catalog of Access Control Products. It contains information on Trine's broad line of strikes, transformers, wireless devices, buzzers and accessories and also describes the company's new strobe chime in depth. Wiring diagrams, a cross reference chart, features, templates and a glossary of terms are also included.

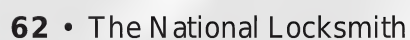


Complete information is available on request, just call: (718) 829 4796 or E-mail: Denise@Trineprod.com.

Corby Appointments

Corby Industries, Inc. recently named Jeff Roth to the position of President. In addition, Frank Polidoro has been named National Sales Manager. **TNL**

August 26-28, 1997
Jacob L. Javits Convention Center



International Security Conference — Exhibitor Listings

Exhibitor	Booth #	Exhibitor	Booth #	Exhibitor	Booth #	Exhibitor	Booth #
3 R Technologies.....	1504	C & K Systems.....	719	ECSI International.....	1346	Flair Electronics, Inc.....	923
A.D.D.M. Marketing, Inc.....	1423	C.O.P.S. Monitoring.....	329	EMX.....	1317	Ford Motor Co.....	739
ABM Data Systems.....	1105	CADDX Controls Inc.....	457	Eastman Wire & Cable.....	772	GD Electronics, Inc.....	368
ACE.....	957	CCTMA.....	211	Elbex America Inc.....	1433	GRI Telemark Corporation.....	138
ADI.....	601	CCTV Corporation.....	411	Electronics Line.....	248	GYR.....	829
ADT.....	1154	CIC Inc.....	1350	Elite Access Systems.....	351	Gaffco Inc.....	144
AES Corporation.....	865	COE.....	1447	Elk Products, Inc.....	847	Garrett Metal Detectors.....	1166
AIT Corporation.....	963	CSI/Speco/Pro-Video.....	129	Elmo Mfg. Corp.....	201	Gentex Corporation.....	866
AMCO Engineering Co.....	264	CSIMC.....	1421	Emergency 24.....	1327	Go Video.....	315
AMSECO.....	913	CZ Labs.....	873	Energy Electric Cable.....	1419	Golden State Instruments.....	147
ARK Solutions.....	1444	Canon U.S.A. Inc.....	1318	Equus, Inc.....	1225	Goyo Optical.....	287
ASC-Ademco Sensor Co.....	711	Capricorn Electronics Inc.....	969	Euro Security News.....	472	HA PRO.....	1222
ASM Group, The.....	970	Cardac Inc.....	1175	Europlex Technologies USA Inc.....	1211	HDS, Inc.....	1354
ATW/Alarm Technology Worldwide.....	1410	Cardkey Systems, Inc.....	941	Evax Systems.....	979	HID Corporation.....	447
Absolute Software Corporation.....	164	Carol Products Co.....	239	Everfocus Electronics.....	219	Hanchett Entry Systems, Inc.....	1047
Accele Electronics, Inc.....	1546	Cellular Alarm Products.....	340	Eversun Technologies, Inc.....	106	Hardy Pickard.....	1511
Access Control Magazine.....	1169	Centennial Security Inc.....	671	ExpoGraf CardKeep AB.....	1072	Hayden Manufacturing.....	1018
Access Denied, Inc.....	1146	Central Monitoring Systems.....	277	FM Systems, Inc.....	268	Hirsch Electronics Corp.....	544
Acme Security Systems.....	1315	Central One Monitoring.....	571	Falcon Electronics Inc.....	1118	Holmes Protection.....	1021
Ademco.....	801	Channel Vision Technology.....	872	Federal Signal Corp.....	1351	Home Systems Installer.....	1024
Adrian Steel.....	675	ChannelPlus/Multiplex Tech.....	345	Fiber Options Inc.....	112	Hypergraphic Impressions.....	1524
Advanced Electronics Group Inc.....	1019	Checkpoint Systems, Inc.....	1210	Fiber Options Inc.....	113	ID Systems.....	1355
Advanced Technology Video, Inc.....	103	Chugai Boyeki (America) Corp.....	935	Financial Security Services.....	149	IDC.....	1360
Advanta Leasing Corp.....	1520	Clark Security Products.....	1147	Fire Burglary Instruments.....	701	IMI Services USA, Inc.....	1325
Affiliated Central Inc.....	864	Clifford of Vermont Inc.....	148	Fire Lite Alarms.....	401	INTEC de Mexico, S.A.....	1123
Aiphone Communication Systems.....	765	Code Access Inc.....	1168				
Alarm Central, Inc.....	1411	Code Blue Corporation.....	1544				
Alarm Industry Products.....	136	Coherent Communications, Inc.....	134				
Alarm Soft Inc.....	1420	Computerized Monitoring Svcs.....	875				
Allied Central Services.....	973	Continental Instruments.....	1343				
Allsafe Co.....	414	Control Screening.....	1518				
Alpha Communication Inc.....	102	Corby Industries, Inc.....	229				
Altronix Corporation.....	539	Cortex Vision Systems, Inc.....	311				
Amano Cincinnati, Inc.....	1172	Courtaulds Performance Films.....	1352				
Amcest Corporation.....	520	Crow Electronic Eng. Inc.....	1014				
American Fibertek Inc.....	202	Custom Newsletter Concepts.....	573				
American Security Distribution.....	927	D/B Cameras-Microcheck.....	410				
American Sensors, Inc.....	1119	DCX Systems, Inc.....	1540				
American Video Equipment.....	123	DSX Access Systems, Inc.....	1239				
Anicom Inc.....	869	Dealers Monitoring Acceptance.....	1361				
Appro Technology, Inc.....	215	Dedicated Micros Ltd.....	841				
Architectural Control Systems.....	949	Delta Designs.....	1339				
Atlas Wire & Cable.....	1310	Detex Corporation.....	1040				
B & B Battery.....	1029	Dice Corp.....	1401				
B.E.S. Manufacturing.....	143	Digital Monitoring Products.....	429				
Bandit USA, Inc.....	1553	Digital Security Controls Ltd.....	657				
Barnes & Reinecke, Inc.....	886	Digital Security Controls Ltd.....	757				
Bead Industries.....	1509	Digitize, Inc.....	166				
Belden Wire & Cable Company.....	1224	Ditek Inc.....	412				
Best Lock Corporation.....	1051	DoorKing, Inc.....	771				
Bi-Tronics Inc.....	1114	Dorado Systems Corp.....	238				
Bradley Data Management Group.....	1305	Dortronics Systems, Inc.....	1244				
Bulldog Gun Safe Company.....	372	DynaLock Corp.....	1255				
Butterworth Heinemann.....	1416	Dynawatch Inc.....	473				



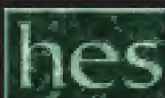
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International Security Conference Exhibitor Listings

Exhibitor	Booth #	Exhibitor	Booth #	Exhibitor	Booth #	Exhibitor	Booth #
ISO/Rainbow	223	Micro Key Software, Inc.	1144	RuMe Corp./Sound Threshold Sys.	1216	TVX, Inc.	1461
Ideal Industries Inc.	1226	Miller Dial Corp.	1248	Rutherford Controls Inc.	1141	TYM Repair Center	1116
Identification Tech. Int'l	1074	Mintron Enterprise USA	1445	S.T.A. Products Corp.	1044	Talk-A-Phone Co.	1526
Idesco	1311	Mirtone	1247	SDM and Security Magazines	1451	Tamron Industries, Inc.	1254
Ikegami Electronics (USA), Inc.	1133	Monaco Lock Company, Inc.	1010	STAT Resources	769	Tane Alarm Products	169
Ilco Unican Electronics	465	Monital Signal Corporation	1110	Safety Technology Int'l	638	Telecor, Inc.	1536
Innovative Business Software	1017	Monitoring Automation Systems	1007	Samsung Opto-Electronics	1261	Telesite USA Inc.	139
Inovonics Corp.	364	Monitronics International, Inc.	1251	Sanyo Fisher USA Corp.	418	Telexis	975
Integrated Security Technology	1173	Morse Watchmans, Inc.	170	Savoy Automation, Inc.	1124	Telular-Adcor Security Product	1053
Intelligent Controls	964	Motorola	1246	Scopus Corp.	286	Terra Publishing, Inc.	1441
Interactive Technologies, Inc.	747	Mythos Systems	116	Seaboard Electronics	1519	Terra Publishing, Inc.	1443
International Electronics Inc.	257	NBFAA - National Burglar & Fire Alarm Association	500	Secura Key	1013	Texecom, Inc.	1026
International Security Review	669	New Era Publishing Company	1539	Securitech Group, Inc.	1041	Tiscor	371
Interstate Battery	1323	Napco Security Group, Inc.	611	Securiton Magnalock Corp.	529	Tomsed	947
J.A.M. Plastics Inc.	1417	National Computer Services	275	Security Associates, Inc.	1344	Toshiba America Info. Sys.	265
J.C. Gury Co.	172	Network Video Technologies	100	Security Dealer	1322	Trango Systems	122
J.P. Freeman and Co.	1127	New Line USA, Inc.	373	Security Door Controls	242	Trine Products Company	587
JJ Communications	312	New York City Police Dept.	1446	Security Group	887	ULTRAK	629
JLM Wholesale Inc.	168	Northern Computers	907	Security Industry Association	901	US Tec	1218
JVC Corporation	301	Northern Video Systems Inc.	251	Security Information Systems	953	Underwriter's Laboratories	1321
KP Electronics Inc.	1532	NuTone Inc.	1333	Security Lock Dist.	165	Union Battery Corp.	246
Keri Systems, Inc.	1501	OSI Security Devices	408	Security Sales Magazine	874	United Publications	687
Key Systems Inc.	569	One 800 Dummy Camera, Inc.	1319	Security Solutions Plus	1551	United Security Products	516
Keystone Wire & Cable Co.	162	Optex (USA) Inc.	421	Security Technology & Design	1452	Universal Battery Corporation	1151
King Central Inc.	642	Opticom Technologies, Inc.	386	SecurityLink from Ameritech	1057	Universal Surveillance	1111
KingAlarm	641	Opto Electronics	1347	Select Engineered Systems	156	Uplink	674
Konica USA Inc.	968	Osborne-Hoffman Inc.	925	Seltronics EyrteI	1510	Vanguard Security Engineering	1150
Kowa Optimed, Inc.	204	Pach & Company	1448	SenTech Corporation	1314	Vicon Industries Inc.	339
L.R.C. Electronics Company	207	PanaVise Products, Inc.	205	Sensormatic Security Prod. Div.	547	Video Mount Products	1427
Labor Saving Devices	578	Panasonic	619	Sentex Systems Inc.	1068	Video Products Repair, Inc.	104
Lari-Jo	1122	Pelco	647	Sentrol Industrial	819	Videolarm	141
Leads Express	686	Pentax Corporation	128	Shepherd Surveillance Solution	318	The Vision Factory	1437
Lease Acceptance Corp.	1087	Philips Electronics	1205	Siedle Communications	987	Vision Research Co.	222
Leasecomm Corp.	1324	PortalPAC Systems	1543	Signal Cable Co.	1145	Visionics Corp.	1174
Linear Corp.	519	Power-Sonic Corp.	338	Signal Communications Ltd.	173	Visions Televideo Technologies	302
Litton Poly-Scientific	400	Presearch Incorporated	150	Silent Knight Security Systems	1161	Visonic Inc.	511
Locknetics Security Engineer	1035	Prism Video	221	Silent Witness USA	1238	Visual Methods, Inc.	217
Louroe Electronics	243	Protech/Protection Tech	1505	Smart Central Vacuums, Inc.	1223	Von Duprin, Inc.	1063
Lucasey Mfg. Corp.	1541	Pulnix America, Inc.	1424	Smokeyloak USA	1521	Watec America Corp.	1233
MCDI	1422	Quantum Group Inc.	273	Solar Gard/MSC Specialty Film	786	Weigh-tronix	966
MCS Communication Prods., Inc.	1250	Quartermaster	1215	Sony Electronics, Inc.	857	West Penn Wire/CDT	208
MER Communication Systems	303	RIA Electronic, Inc.	1217	Sprint/North Supply	729	Westinghouse	1415
MIROS, Inc.	1069	ROFU-GEM LTD	1049	Stargate Tech	1170	Wheelock, Inc.	151
MOD-TAP RCS	174	RTL Technology Inc.	1027	Stellar Security Products, Inc.	1052	Winfield	1050
Macurco	160	Radionics	501	Strategic Vista Corp.	1219	Wing Enterprises Inc.	342
Marlee Electronics Corporation	1214	Ramtech Corp.	977	Street Smart Security	768	Winland Electronics	668
Marshall Electronics	664	Ranger Security Detectors Inc.	1438	Sungard Mailing Services	1414	The Winsted Corporation	406
Mas-Hamilton Group	1155	Recognition Systems, Inc.	1073	Superscope Technologies, Inc.	319	World Security Central Station	1508
Matsuo Sangyo Co.	271	Remee Products Corp.	1117	Synergistics	1115	Wren Associates	305
Maxwell Alarm Screen Mfg.	439	Reproduction Technologies	586	System Sensor	811	X-10 Pro	764
May Advertising	673	Research Electronics	1429	Sytron Security Products, Inc.	1514	Xantech	1025
Mayflower Sales Co Inc.	470	Richard J. James Insurance	972	TECNOALARM	1340	Xetron Corporation	919
Merry Electronics USA	1513	Richardson Electronics	300	TELEDYNAMICS CORP.	1125	Yuasa-Exide, Inc.	565
Micro Identification Systems	1075	Rokonet Industries	157	TESA Access Control	1138	ZERO/EMI/Stantron	321

TNL



PRODUCT SHOWCASE

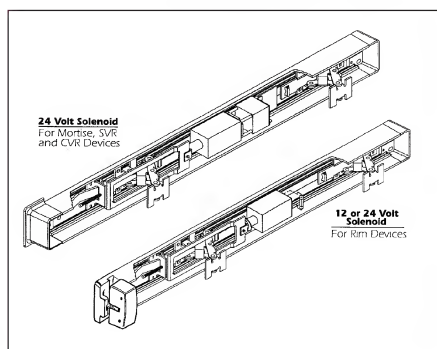
The ISC East Show - August 1997

Free Video of New Photobeam Introduction



Optex introduces New Outdoor Short-range, Mid-range, and Long-range Photoelectric Beams. These beams are designed to provide reliable operation even under extremely harsh environment such as dense fog and high lightning areas. The Free Introduction Video illustrates the products reliability by showing actual testing. This video is also an educational tool for teaching the basics of photobeam technology and techniques for selecting the correct beam product.

Adams Rite Solenoid Option Provides Remote Access



Adams Rite Manufacturing Co., now offers a solenoid option for remote electrical latch retraction of its full line of exit devices. For concealed and surface vertical rod and mortise exit devices, a 24 volt DC solenoid is mounted inside the pushbar to retract the latch from a remote location. Two exit devices can be operated with an Adams Rite 29-0104 power supply.

For rim mounted devices, a choice

of 12- or 24-volt DC solenoid allows two exit devices to be operated with only a transformer/rectifier combination. No special power supply is needed.

New Model 905/907 Operators



DoorKing has introduced two new slide gate operators to its product line. The new model 905 and 907 operators are based on the companies popular 910 operator, but do not offer all of the advanced features as the 910 and are priced lower.

The 905 is equipped with a 1/3 HP motor, while the 907 uses a 1/2 HP motor. Both operators feature a microprocessor control board that eliminates limit switches, relays, and contactors. The operators automatically set their own limits and make automatic adjustments for any gate coasting. Both models feature the companies patented fail-safe release system, power switch, plug-in loop detectors which simplify wiring and make detector installation easy.

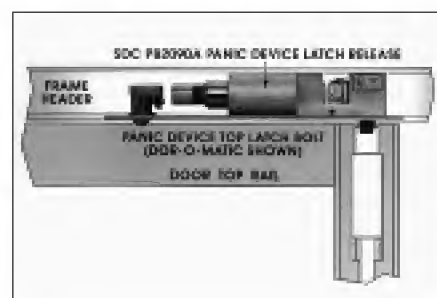
Domino Keyless Entry System Gets New Look



Domino Engineering Corporation has redesigned the packaging for their Domino Keyless Entry System. The Domino Keyless Entry System is a low cost security keypad that works with electric garage door openers, eliminating the inconvenience and the security hazard of keys. Domino Engineering Corporation also manufactures keypads and controllers for electric strikes and magnetic locks.

The Domino Keyless Entry System is available nationwide from most industry distributors.

Electric Lock Provides Control for Mechanical Panic Devices

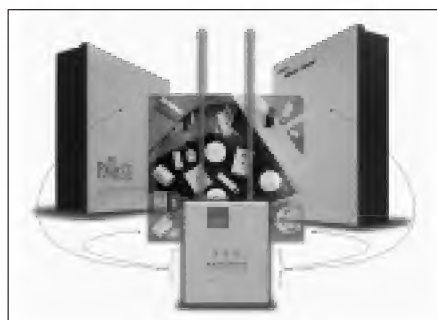


Security Door Controls' (SDC) PB2090A PanicLok® is designed to work in conjunction with Dor-O-Matic, Kawneer, Jackson and Adams Rite concealed vertical rod panic devices.



When installed in the frame header, the SDC PanicLok® electrically controls the top latch assembly of the panic device. The push bar is always operable from the inside for uninhibited egress, therefore this device is used for controlled access from the outside only. Access control is accomplished by way of card readers, keypads, key switches, or electric controls which can release single or multiple doors simultaneously.

The ITI Quik Bridge™ Loop Receiver



The new Loop Receiver makes ITI wireless sensors compatible with hardwire control panels, so dealers of hardwire or wireless security systems can take advantage of wireless technology. The new receiver allows security dealers to offer upgrades to existing customers and to speed up installations by using reliable ITI patented Learn Mode wireless sensors in new and existing construction.

Each zone can supervise up to 2 sensors, allowing the receiver to supervise as many as 16 sensors. Each zone has a corresponding red indicator light that indicates the zone's status. Two other indicator lights turn on if a zone has a low battery or a supervision failure.

Weiser Lock Unveils The Powerbolt™

Weiser Lock has just introduced an innovative Electronic Keyless Entry System — the Powerbolt. With the Powerbolt, parents won't have to worry about their children being locked out because of lost keys, commercial service personnel



can gain access to a home without the worry of key duplication. With just the touch of a 4 to 8 digit code, the Powerbolt offers safe, and quick access into a home. When exiting the home, a door is locked simply by pressing a one-touch locking button.

In the Fall of 1997, the Powerbolt will also be available with radio frequency remote control operation. This remote will make locking and unlocking your door more convenient than ever before. Simply push the remote for access or to lock your door.

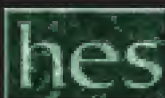
Radio Key® 600 The Solution to High Process Proximity Systems

Secura Key announces the new RADIO KEY® 600 proximity access control system. Radio Key® 600 features a built-in programming keypad, audible and LED indicators, a power supply and stand-off spacer for mounting on metal surfaces. A low-cost auxiliary reader is available for higher security or extreme weather applications.



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No hand-held programmers, PCs or separate control panels are required. Radio Key ® 600 installs easily to a standard electrical box or wall surface, and post mount adapters are available.

Alarm Lock Electric Door Locks

Alarm Lock Systems, Inc., a division of the NAPCO Security Group, offers Models 103 and 104RA electric door locks for those needing

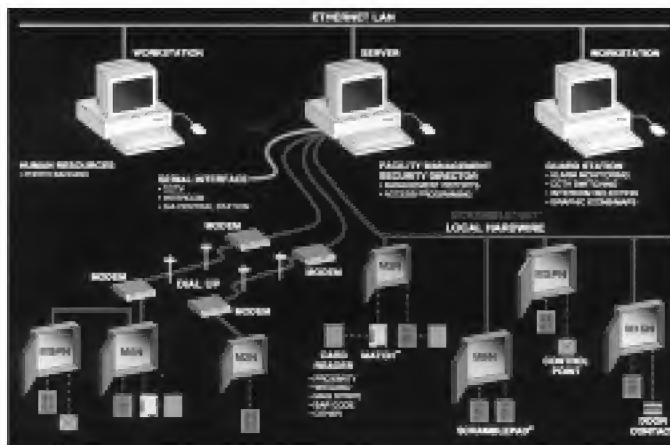


a "safe and secure" method of protecting themselves and their premises. These strong, yet compact, electric locks are simple to install on all types of doors.

When installed the door can be quickly and easily locked or unlocked by a person activating a remote switch, a key switch, a time programmer, or other electrical contact which interrupts the power. Alarm Lock's electric door locks provide instant, reliable protection for situations where top security is a top priority.

ScrambleNet Access Manager (SAM) Version 3.00

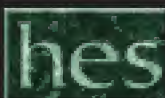
SAM 3.00, Hirsch's high security access control system software that runs on Windows 95 and Windows NT 4.0 is now shipping. This scalable software program is competitive for entry level applications and powerful enough to handle high end applications as well. SAM 3.00 now runs ID Manager (Hirsch's Photo Badging Software) and ALARM*TRAC2 (Hirsch's Graphical Guard Station Software) on the same



NATIONAL AUTO LOCK SERVICE, INC.

National Auto Lock Service, Inc. offers a wide range of equipment and services for the Automotive Locksmith. From tools and hard to find key blanks to transponder programming, we can take the mystery out of car service. We accept credit card orders, and can ship COD. Contact us for the latest in automotive technology.

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PC and LAN. This saves on the cost of PCs and has a lower total installed cost.

Running SAM 3.00 on Windows 95 and NT 4.0 creates a wide choice of modern stable platforms and the ability to mix and match operating systems on a LAN. SAM is a management tool for accountability and audit trails, and an information resource for personnel.

Sensormatic's EZ Entry Access Control Panel

Sensormatic Electronics Corp. has announced the release of the Software House EZ Entry Access Control Panel which provides an entry-lever, cost-effective security solution for small businesses. The EZ Entry panel governs secure access control for one or two doors and up to 3,000 identification cards.

All functions are programmable from a keypad and a large LCD without the need for elaborate software. The keypad is intuitively arranged so that there is no need for training to program or operate the unit. The system's software



emulates the keypad and enables remote programming and access.

JLM Now Stocking Security Door Controls

JLM WHOLESALE is now stocking Security Door Controls' Surface



Mounted Bolt Locks.

Designed for either single or pairs of doors, these electric deadbolts are available for a variety of application needs. Capable of withstanding substantially greater force than conventional electromagnetic locks, the locks provide higher security for inner office doors.

The 170 and 270 series are fully enclosed and have been specially designed to mount to the top of the door frame on the push side of the opening. The 180 and 280 series are smaller and designed for universal mounting applications including: the door header, side jamb, pull side or push side of the opening. **TRL**



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Auto Opening Opening The



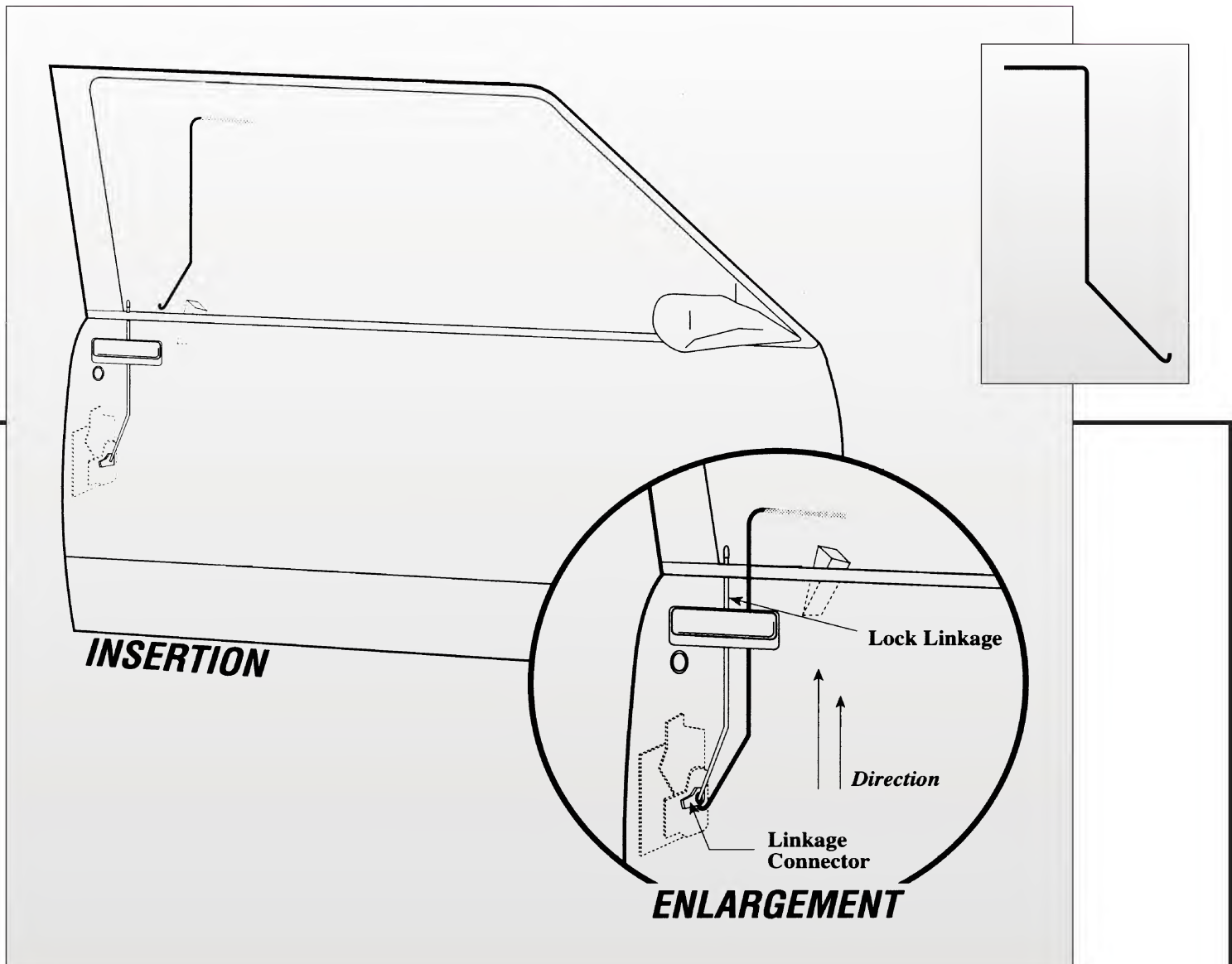
With the introduction of the new 1997 Cadillac Catera, Cadillac is making an effort to draw a younger, female audience into its market. The moderately priced Catera is already beginning to show its face in many cities. The Catera is Cadillac's mid sized sports car which is manufactured in Germany and marketed as the Cadillac that ZIGS.

The Catera is equipped with a standard pop-up lock button system, so we will perform this opening using the 1822RW "Redwood" tool from High Tech Tools car opening set.

First, using the passenger side front door, insert the strip saver, so that you do not damage the weather stripping on someone's car. Next insert the wedge to create an opening for the tool. The insertion point for the strip saver and wedge is a few inches inside of the door handle.



1997 Cadillac Catera!



Point the hooked end of the 1822RW Redwood tool towards the rear of the car. The insertion point for the tool is directly above the door handle, just to the right of the lock button. The lock button is visible through the window. Lower the tool deep into the door, almost all the way to the tool's handle.

Once the tool is lowered, you must turn the tool's handle slightly **AWAY** from the car, so that it is pointing almost directly back to you. Turning the handle allows you to hook the linkage connector at the base of the car door. Once the

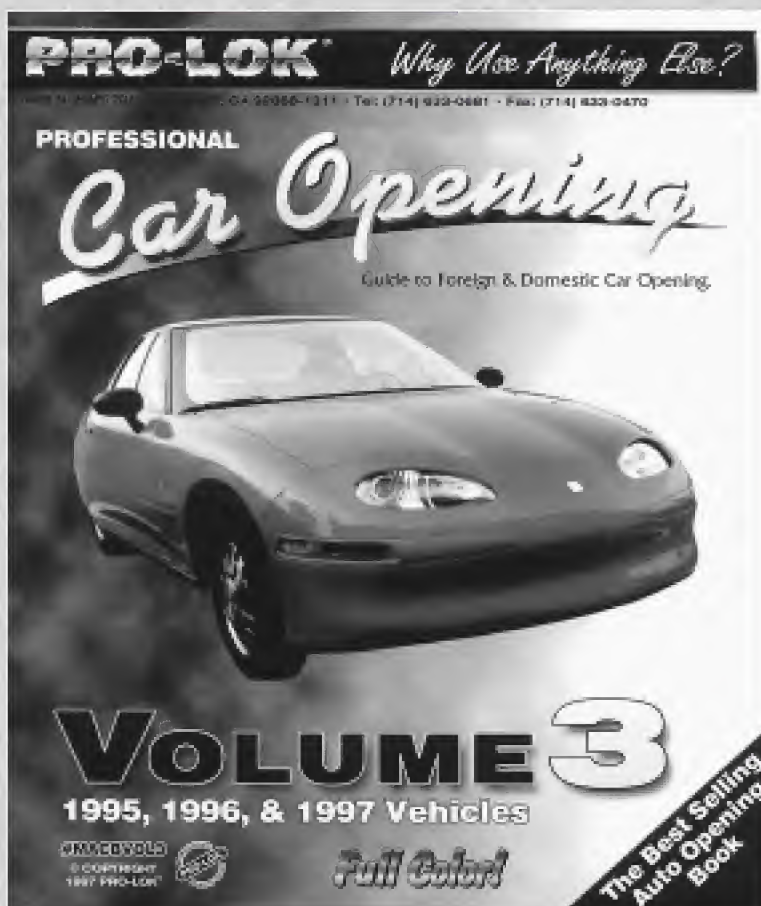
handle is turned, lift the tool a little bit to grab the linkage connector. Once you contact the linkage connector, you will feel the tool stop and may even see the door lock button move. At this point, simply lift the tool handle to unlock the door.

It is important to note that while the Catera has a pop-up lock button and a door lock rod, attempting a common opening by hooking the lock rod higher in the door instead of the linkage connector at the base of the door may not work that easily due to a protected linkage in this vehicle. **TNL**



**A Monthly Review of
Technical Manuals**

Professional Car Opening Volume 3, by PRO-LOK



This month we start a new feature titled "The Bookmark." The purpose of this feature is to present actual pages taken from various technical manuals available to the locksmith industry. This will not only provide you with useful technical information, but also give you some insight into the characteristics of each manual presented.

Should you be interested in purchasing a complete copy of the manual featured, contact information is provided.

PRO-LOK Volume 3 Professional Car Opening Manual

This manual covers three years of car opening details featuring over 900 full color photographs showing step-by-step opening procedures. Exclusive 'ALL-ON-ONE' format puts all data about each specific vehicle on the

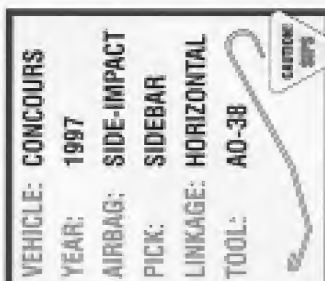
same page. The manual contains foreign and domestic lockout information from 1995, 1996 and 1997, collated into one easy to use volume. Specific instructions on how to bypass the latest anti-tool lockout components is also included. A helpful tips section lists cars with side-impact airbags and other auto industry information.

Collated by manufacturer for easy location of important information, the manual is over 400 pages in an 8-1/2" x 5-1/2" format bound in a three ring binder. There is also indexing tabs for: Contents by manufacturer; Index by model name; Information hot tips; Tools Usage instructions; and Opening details & photos.

Suggested dealer price for the Professional Car Opening Volume 3 manual is \$79.50.

PRO-LOK is located at: 655 N. Hariton, Orange, CA 92868-1311. Tel: (714) 633-0681; Fax: (714) 633-0470.

97 update



OPENING INSTRUCTIONS:

- 1 Insert a wedge 9" from the rear edge of the front passenger door window glass.
 - 2 Insert a probe light and identify the white plastic guard plate.
 - 3 Insert the AO38 at 4 1/2" from the rear edge of the glass, tip facing rearward.
 - 4 Lower the tool 18" into the door cavity and rotate it 135° clockwise.
 - 5 Lift the tip of the tool up under the lower horizontal rod. Lift the tool and pivot it forward to unlock the door.
- Caution!** Front door contains a Side Impact Airbag. We have successfully opened this car. PRO-LOK® assumes no liability for YOUR actions. Open at your own risk.

Modeling:	PRIMARY KEY (GATION ONLY / PASS KEY	SECONDARY KEY: ALL OTHER LOOKS
Code Location:	PRIMARY: GATION (G/S	
Code Series:	PRIMARY: 00-00-00	000-000
Code Book:	VOLUME 01, SECTION 02, PAGE 246-247	
Code Card:	0000	
Look:	GATION: 703547 (CODED PASS)	DOOR: 703000 (UNCODED PASS) TRUNK: 700736 (UNCODED)
Key Blank:	PRIMARY: STRATIFIC PASS KEY 544201 - 544215	CURTIS: 20101 A - 20113 A ILO 06201-15
	SECONDARY: STRATIFIC: 320405	CURTIS: 845 ILO 51003 H LET 04500

Concours

CADILLAC - PAGE 24

FORD

OPENING INSTRUCTIONS:

- 1 Insert a wedge 6" from the front edge of the split window divider on the rear passenger door.
- 2 Insert a probe light and identify the horizontal, cloth covered rod.
- 3 Insert the AQ47 at 3" from the split window divider, tip facing rearward, directly in front of divider.
- 4 Lower the tool 7 1/2" into the door cavity and rotate it 90° clockwise.
- 5 Set the tip of the tool down on the cloth covered lock-rod. Twist the tool to bind the tip onto the rod and slide it forward to unlock the door.

Keyring:	ALL LOOKS KEVED ALINE
Code Location:	NONO (ON VEHICLE)
Code Series:	0001X - 1/100X
Code Book:	VOLUME 13, SECTION F.U. PAGE 032
Code Card:	CX101
Links:	IGNITION STRATICS T032M (UNCODED) DOOR T033G (UNCODED, PARE) TAILGATE T033B4 (UNCODED)
Key Blank:	STRATICS 580332 TRAKSPONDER KEY

Expedition

FORD PAGE 59



'97 UPDATE

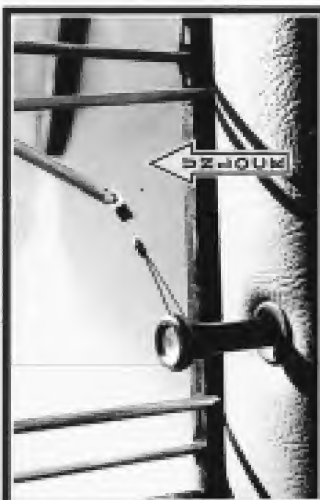
MERCEDES



VEHICLE: E CLASS
YEAR: 1997
PICK: HIGH SECURITY
LINKAGE: VERTICAL
TOOL: A033 & A045

OPENING INSTRUCTIONS:

- 1 Insert a wedge 7" from the front edge of the **REAR PASSENGER DOOR** glass.
- 2 Insert the A033 at 1" from the glass. Lower the tool into door cavity, rotate 15° to 20°. Raise tip of tool up into interior of vehicle.
- 3 Insert A045 at 5" from the glass, tip facing forward.
- 4 Lower the tool into the door cavity and rotate 15° to 20° under window glass. Remove wedge. Work the tip of the tool up into the interior of the vehicle.
- 5 Manipulate the loop over the button head. Twist the tool counterclockwise, pivot handle rearwards and lift to unlock the door.



Keying: ALL LOCKS REKEYD ALIVE
Code Location: NONE ON VEHICLE
Code Series: N/A
Code Book: N/A
Code Card: N/A
Locks: DEALER
Key Blank: MULLER LCO-5000-P 50.00 100.00

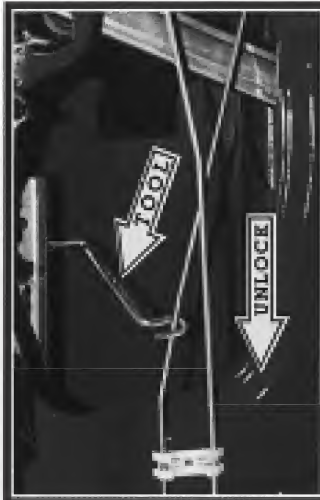
'97 UPDATE

MITSUBISHI

VEHICLE: ECLIPSE
YEAR: 1997
PICK: PAS CCW
LINKAGE: HORIZONTAL
TOOL: A0-39

OPENING INSTRUCTIONS:

- 1 Insert a wedge 15" forward of the rear edge of the passenger door window glass.
- 2 Insert a probe light and identify the two horizontal rods.
- 3 Insert the A039 at 11" from the rear edge of the glass, tip facing forward.
- 4 Lower the tool 10" into the door cavity and rotate it 45° counterclockwise.
- 5 Lift the tip of the tool up under the upper/outer horizontal rod as shown. Twist the tool to bind the rod and slide it forward to unlock the door.



Keying: ALL LOCKS REKEYD ALIVE
Code Location: PASSENGER DOOR CRUMPLER
Code Series: E3001 - 7000
Code Book: VOLUME 01, SECTION 02, PAGE 100
Code Card: CTM
Locks: DEALER
Key Blank: CURTIS MT-1 LDO-5000-P 50.00 100.00

Norton PowerMatic

Door Operator

by Tom Russell

Power assisted door closers were first introduced by Norton in 1990 in response to the Americans with Disabilities Act (ADA). The electrohydraulic device incorporates basic hydraulic door closing operation with an electronically controlled motor to provide assistance in opening the door (see Photograph 1). A variety of methods were developed to operate the door including wall switches, scanners, remote control devices and even a slight push/pull of the door.

Although the operation of the unit is sophisticated, the installation of the Norton PowerMatic is really not much more involved than the proper installation of a standard hydraulic door closer. All the components are mounted on a back plate which is attached to the door frame by seven attaching screws (see Photograph 2). The only other step is to connect a few wires. But let's start at the beginning and go through an installation step by step. All photographs used in this article were taken from an installation video on the PowerMatic door operator.

Before beginning the installation verify the door frame is properly reinforced and well anchored to the wall. The installation instructions include a chart which describes the requirements and recommendations for frame reinforcement. If the frame is not sufficiently reinforced we recommend using rivet nuts for the mounting holes. The nut screws onto the end of a special tool and is inserted in two drilled holes (see Photograph 3). The tool is compressed and the nut flares out on the backside of the frame as shown on this piece of metal (see Photograph 4). Incidentally, the rivet nuts can also be used when installing the angle bracket used for low ceiling clearance.

It's also necessary to be sure the electrical power and switching wires

Continued on page 90



1. The Norton PowerMatic Series 6600/6700 power operated door control.

Continued from page 88



2. All components are mounted on a back plate which is attached to the door frame.



3. The nut screws onto the end of a special tool and is inserted in two drilled holes.



4. The tool is compressed and the nut flares out on the backside of the frame as shown.



5. The green wire is connected to the green ground screw on the backplate.

have been pulled to the frame. The unit requires 120 volts, 60 hertz. Power is available through Terminal "JP4" at 24 volt DC up to 1/2 amp for any accessory items such as wall switches or scanners that may be used with the unit.

Make sure the power is off while you are working on the electrical connections.

INSTALLING CLOSER BODY

The PowerMatic unit is shipped completely assembled with installation instructions, fasteners and brackets in a foam lined carton to protect the electronics. It can be ordered in several configurations and we have chosen a slide track arm with a motion detector and wall switch for this article.

The operating unit is always installed on the door frame which must be at least 2" high. Two holes are provided in the back plate for 1/2" flexible conduit connectors. One is for the incoming 120 volt AC power and

the other for the remote switch and scanner wires when concealed wiring is used.

The installation instructions contain a dimensional line drawing which indicates where the holes for the power connection, switch and scanner wires, as well as where the seven mounting holes are located on the door frame and the location of the holes for the slide track on the door. Template locations and door and frame preparations are identical for each arm application except the shock absorbing shoe unit of Norton's double lever Unitrol arm.

The PowerMatic is mounted on the door frame face first, which requires a minimum 5" ceiling clearance to properly install and adjust the operating unit. If you have a low ceiling with less than a 5" clearance, an angle bracket is available for push side units which mounts to the underside of the frame. The closer backplate is

then mounted to the frame face and vertical leg of the angle bracket.

Mount the plate with all the components attached to the frame using the seven attaching screws. If concealed wiring is being used, pull the power and the switch and scanner wires through the holes provided in the back plate before tightening the plate to the frame. You can use a surface conduit bracket with two holes for connection of 1/2" EMT connectors. The cover has two knockouts for this type of installation.

Power connections are made at Terminals "COM" and "HOT." The white wire is connected to Terminal "COM," and the black wire to Terminal "HOT." The green wire is connected to the green ground screw on the backplate (see Photograph 5). Connect the power and tighten the clasps.

The scanner is connected to Terminals JP41 and JP4-2 and JP13 and JP1-14. The white and green wire



6. To install the slide track, first remove the small piece of masking tape.



7. Notice the nylon bushing on the slide track.



8. Snap the pin on the end of the arm into the bushing.

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connect to Terminals JP13 and JP14, the red wire to Terminal JP42 and the black ground wire goes to Terminal JP41.

The wall switch will be connected to Terminals JP110 and JP111 which are marked "AUX 2" and "GND." Either wire can be connected to either terminal.

That completes the installation of the closer body.

SLIDE TRACK INSTALLATION

To install the slide track, first remove the small piece of masking tape used in shipping (see Photograph

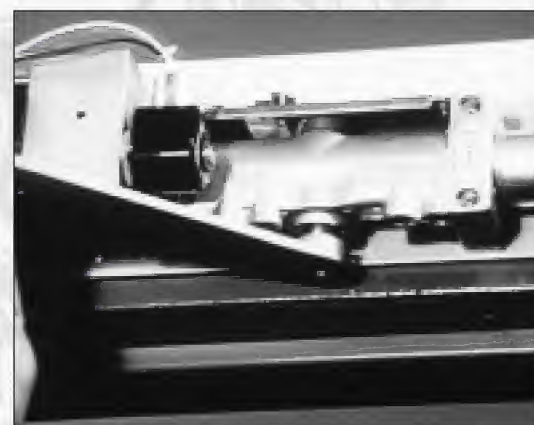
6). Notice the nylon bushing on the slide track (see Photograph 7). Snap the pin on the end of the arm into the bushing and lock it in place (see Photograph 8). If you need to disassemble the arm at some later time, slide the clip back and lift out the arm.

Now you're ready to mount the slide track to the door. Three sex bolts are provided to mount the unit. The unit is mounted with the cushion stop towards the hinge edge of the door. Attach the arm to the door with the fasteners provided.

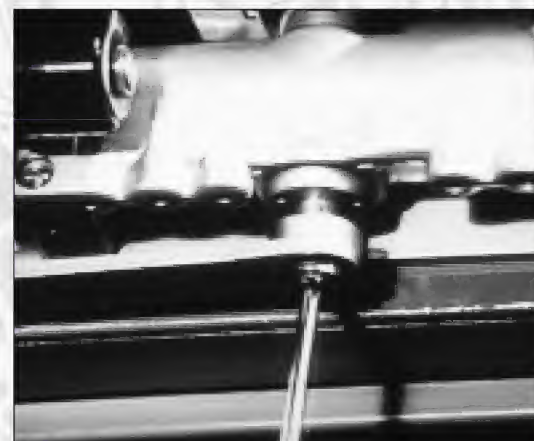
Before installing the arm, snug down the latch and sweep valves (see Photograph 9). Position the arm on the pinion facing away from the door at a 45 degree angle (see Photograph 10) then rotate the pinion back to about 100 degrees to pre-load the door closer. Reposition the arm at 90 degrees and secure it to the pinion with the special screw and counter sunk washer (see Photograph 11).



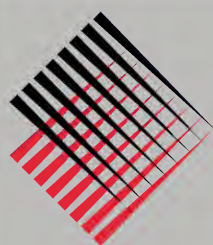
9. Before installing the arm, snug down the latch and sweep valves.



10. Position the arm on the pinion facing away from the door.



11. Reposition the arm at 90 degrees and secure it to the pinion.



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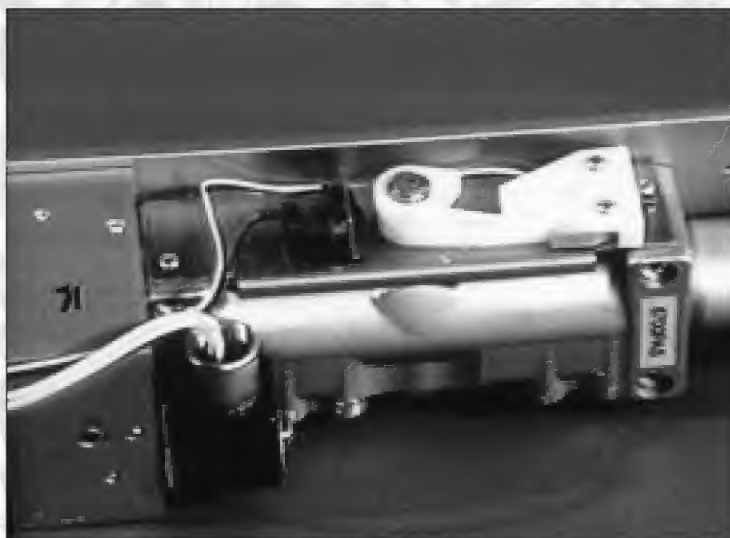
Continued from page 92



12. Open the door and snap the pin onto the slider in the track.



13. Now that the closer is installed, adjust the latch and sweep speeds.



14. If a wider opening is required adjust the L2 cam switch with the 5/32" hex wrench.



15. The completed installation of the PowerMatic.



To complete the arm attachment, rotate the main arm away from the frame, open the door and snap the pin onto the slider in the track and push in on the clip to lock it into place (see Photograph 12).

Now that the closer is installed, adjust the latch and sweep speeds (see Photograph 13). Open the door and open the valves several turns.

Test the closing speeds by letting the door go through the closing cycle and adjust the individual speeds as necessary.

The unit is preset at the factory for 85 degree opening. If a wider opening is required (up to 110 degrees) adjust the L2 cam switch with the 5/ 32" hex wrench packed with the unit (see Photograph 14) and

an open end or adjustable wrench. Loosen the screw and rotate the cam so that it's at the mid point of the toggle switch. Set the door opening to the desired point and tighten the screw.

The final test will be to check the operation of activating devices (wall switch, scanner, door movement) to be sure they are operating correctly.



16. If the door closer force is insufficient, adjust the sweep and latch speed valves.



17. You can also increase the spring power at the end of the closer.

The completed installation of the PowerMatic can be seen in *Photograph 15*.

In the event you are called to service a unit not operating properly, here are several simple trouble shooting steps to help you resolve the problem.

TROUBLESHOOTING TECHNIQUES

Hydraulic Problems

If the door closer force is insufficient, adjust the sweep and latch speed valves on the underside of the

unit (see *Photograph 16*). Since this is a multi-size hydraulic closer you can also increase the spring power at the end of the closer (see *Photograph 17*).

If the unit provides too much door opening force, turn the pressure adjustment valve (PA) counterclockwise. Adjust the speed control valve (SC) by turning it in the same direction (see *Photograph 18*). Fine tune with the pressure adjustment valve (PA).

If the unit opens the door too fast, adjust the speed control valve (SC) by turning it counterclockwise. Fine tune with the pressure adjustment valve (PA).

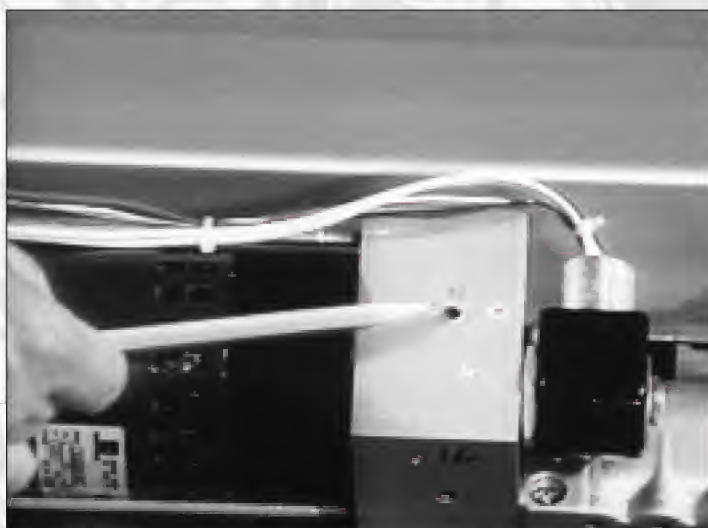
If the door acts sluggishly in the backcheck range, adjust the pressure valve (PA) in a clockwise direction. Adjust the speed control valve (SC) in the same direction and fine tune with the pressure adjustment valve (PA).

If more opening force is required due to stack pressure in stairwells or



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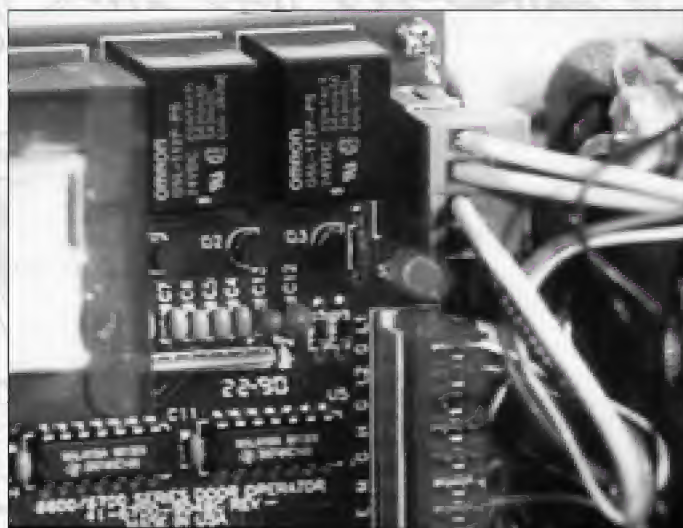
18. Adjust the speed control valve (SC) by turning it in the same direction.

other circumstances, turn the pressure adjustment (PA) valve counterclockwise. Adjust the speed control valve (SC) in the same direction and fine tune with the pressure adjustment valve (PA).

Electrical Problems

Note: Be particularly careful to avoid hazards which may result in an electrical shock when you are checking for electrical problems.

If the door does not appear to be receiving power, slide the "Selector Mode Switch" to either the "Hold open" or the "On" position. Remove the cover and check to see if the red LED is illuminated (see Photograph 19). If it is "on" check the solenoid and motor connectors and connections to insure they are secure. If the LED is not illuminated, check Terminals "HOT" and "COM" to be sure the input leads are properly and securely connected.



19. Remove the cover and check to see if the red LED is illuminated.

With a volt meter check the incoming power to be sure the unit is receiving 120 volts. If there is no voltage at the terminals, the problem is between the circuit board and the power source.

If the unit is receiving 120 volts check the "F2" fuse (see Photograph 20). If it is bad, unplug the solenoid and motor lead connectors, replace the fuse and check to see if the LED illuminates. If it does, either the solenoid coil, the motor connections,

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20. If the unit is receiving 120 volts check the "F2" fuse.



21. If the LED is not illuminated, check fuse "F1."

wires or motor windings are defective. The solenoid coil can be tested by checking the resistance with a volt meter. A reading of 2,000 to 2,100 ohms indicates it is good.

If the LED is not illuminated, check fuse "F1" (see Photograph 21). If the fuse is good, the circuit board requires factory service. If the fuse is blown, check the terminal strip at Terminals JP42 for a short across the terminals. Disconnect the leads at Terminal JP42 and replace fuse "F2." The red LED should illuminate with the power on, if not, the circuit board requires factory service.

IN CLOSING

Power operators like the Norton PowerMatic are being used more and more not only in applications to comply with ADA requirements, but on many doors where the convenience of automatic opening is helpful. Although the installation is just a little more complicated than a standard mechanical door closer, it is an opportunity for the locksmith professional to offer his or her special skills and training to the user. **TNL**



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Business Phone Etiquette

by Carol Brzowski-Gardner

One of the most important people in your company is most likely a person whom your clients will never meet, but will talk with. That's the person who answers the phone. While they most likely hold the position of "receptionist," this person is in essence your company's baseline salesperson. Their knowledge and attitude may make or break more business than you realize.

Here are 10 tips for making sure your company is practicing good phone manners:

✗ The person answering the phone should do so with a three-part greeting: "Hello, Smith Company. This is Jennifer speaking. How may I help you?"

How many times have you personally made business calls only to have to ask what company you've called or to whom you are speaking because this information wasn't made clear in the answer. What impression did that bring you of that company?

✗ Your front-line person answering the phone should have important data on hand. While they won't be the ones conducting primary

business with your clients, they should be trained in product knowledge and service options just like any other employee so that they can answer rudimentary questions.

✗ As obvious as it may seem, the front-line person should speak clearly and have a pleasant voice. It even helps to smile as he or she speaks. "Please" and "Thank you" go a long way in showing respect. Having the correct information and delivering it in a friendly tone may give the potential customer what he or she seeks without having to dig further and that may result in a second phone call to solicit your business.

✗ If the front desk person doesn't have the answers, they should immediately refer the caller to someone who does. Nothing is more annoying to a caller than these three words: "I don't know."

✗ Some people don't mind using an automated telephone system. If your company has one, be sure the recordings provide as much information to your client as possible.

There are people who detest dealing with machines. If you have an automated system, make sure you make allowances for those who want to talk with a real person.

✗ Increasingly, many people are working beyond the 5 p.m. hour and may reserve making some business decisions toward the end of the day. Also, you may have customers who are private rather than business customers and may not be allowed to make certain phone calls during their working hours.

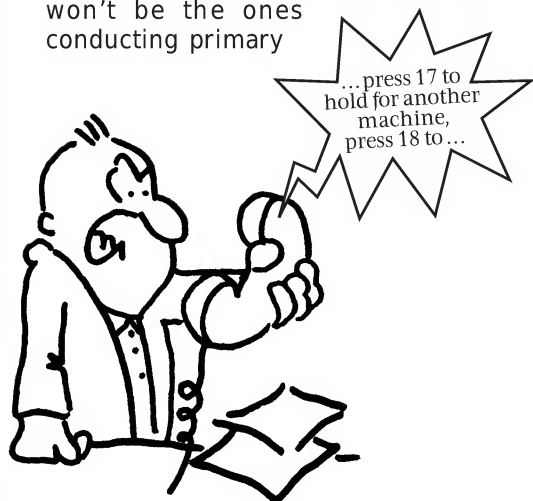
Make sure your company has evening phone answering capabilities, whether it be an answering machine that affords the

client the opportunity to leave a message (and someone should be periodically checking the messages), an answering service or a paging system. You could lose business if all your potential client gets after 5 p.m. is an unanswered phone and your competition is there to catch them as they fall through the cracks in your system.

✗ Many areas of the country are becoming increasingly bilingual (or, in some areas, even three or more languages share equal billing). No matter what your personal philosophy regarding "English first" your business will stand out if you accommodate those for whom other languages are primary. It helps if your telephone person can speak two languages or know immediately to whom the call should be referred if they cannot speak the language of the caller.

✗ Offer your telephone person incentives for treating the customer right. If you know business was obtained partly because of the way the client was handled on the initial phone call, reward the person for a job well done.

✗ For quality control, make a check of your company's telephone manners occasionally by having a friend or relative whose voice is unknown to the person answering the telephone call up and ask some standard questions. A potential customer who is disenchanted by your company's lack of phone manners may not take the time to point out such problems to you. Many companies these days are monitoring employees' phone calls as a matter of course (and this is announced to the caller on a message for legal protection) though this practice may





not be held in high regard by your workers.

✕ Customers should not be put on hold for long periods of time. If this happens occasionally, make sure the person answering the phone checks back with the caller every 30 seconds or so to give the caller a status update.



If your company's phone is going unanswered because the work load is too much for the front desk person, it's time to consider hiring more help - or maybe a temp for those times of the day when the phone seems to be ringing off the hook.

You may want to consider an 800 number, which cuts down on your callers' frustrations, especially if they have to wait a bit to have their questions answered on their dime. Before doing this however, realize that you will be paying for every call and 800 numbers tend to get abused. It can increase business, but be sure that the increase in business exceeds the cost of the 800 line.

By the way, no matter what your company's policy on personal phone calls may be, some personal phone calls are a fact of life for employees, especially those with families and those who put in long hours. If you have only a few lines, consider offering your employees a "phone break" during a time of the day when business calls are slow, thus eliminating the possibility of your lines being tied up when you most need them.

A telephone may seem like a trivial thing, but clear, working equipment and a human being who takes their job of answering the phone seriously, may mean the difference between you or your competition getting business when all other things are equal. **TNL**

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1. The Lectro Truck is made by Innovative Moving Systems, Inc. out of Oostburg, WI.



2. It is very easy to take a safe up or down a flight of stairs using the Lectro Truck.

The Lectro Truck

By Don Shiles

If you are a safe technician, move safes, or just work on them once in awhile, there is a tool that you absolutely should have for your shop. Not only does this device make your life easier, but also safer.

Over the years I have used a lot of different safe dollies, carts, and other devices for moving safes from one

place to another. Some work reasonably well, others don't work at all. Now I have found one that not only moves safes from one office to another, but will take them up and down stairs, help you load safes into a truck, even wheel them across open ground.

I recently bought one for our shop and now wonder how we ever survived all those years without it. It is called the Lectro Truck and is made by Innovative Moving Systems, Inc. out of Oostburg, WI (see Photograph 1).

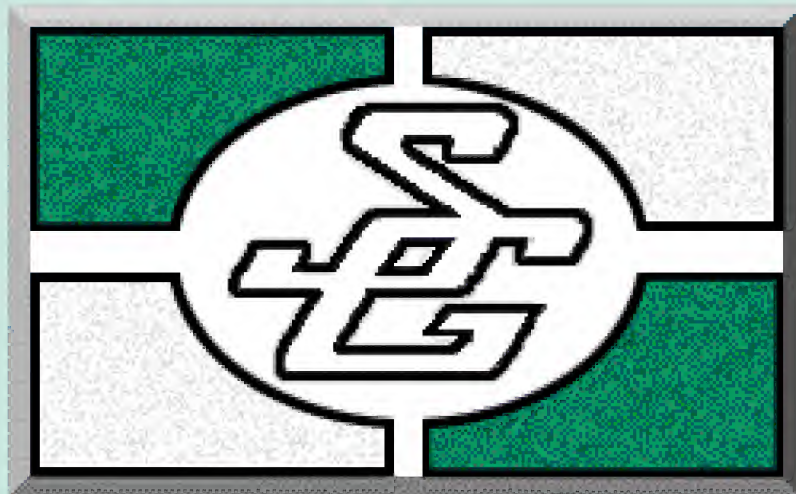
One of the major advantages I found with this device is that it will handle all of the U.S. Government containers since it has a load limit of 1500 pounds. That enables one man to handle a Class 5, five drawer security container which is filled with paper. I was surprised to discover the Lectro Truck has been around since the early 70's and only wish I had found it earlier.

The Lectro Truck is powered by a 12 volt battery and requires the battery charger accessory available from Lectro Truck, or you can use any other automotive type battery charger. There have been numerous improvements made over the original models that probably would make it worthwhile to replace if you have one.

Some of the improvements have been designed to strengthen the unit and make it more durable, some have



3. The procedure for lifting or lowering a safe into or out of a truck bed which is quite easy.



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improved the safety features, and others have simply made the unit more user-friendly.

Under the category of safety, the company has developed an automatic electromagnetic braking system to replace the original friction type brakes. There is also a built in safety system to prevent an operator from attempting to lift a load further than is safe. As a matter of fact, this was the only problem we found in using this device.

There is a built-in limit switch that turns off the unit if you attempt to raise a load higher than is safe. We found that there was nothing in our instructions or operating guide that told us about this switch. When our unit went dead, we assumed we had broken something and it was only after a detailed search that we found the limit-switch (a breaker button) inside of the battery box. You simply have to open the battery box, look on the right hand side of the box and there you will find a push-button switch. By pressing the re-set, your unit is back in operating order.

The newer version Lectro Truck was significantly strengthened

compared to the older version. The motor has been enlarged, the frame and leverage system was strengthened, a higher amperage battery was added, and the drive screw system that raises and lowers loads was made larger and stronger. The entire unit is also more user-friendly due to the larger, easier to hold handles and the addition of an on/ off switch.

The company has also added to their product line several accessories to make your life easier. One of these is the battery charger already mentioned. My favorite is the set of large size wheels that allow you to use the device on rough terrain, e.g., across a grassy yard, a gravel or asphalt driveway, or even a sandy patch.

As you can see in *Photograph 2*, it is very easy to take a safe up or down a flight of stairs using the Lectro Truck. I tested it with an 1100 pound safe (a five drawer Diebold), and while it is slow, I was able to move the safe both up and down the stairs by myself without difficulty.

Photograph 3, shows the procedure for lifting or lowering a safe into or out

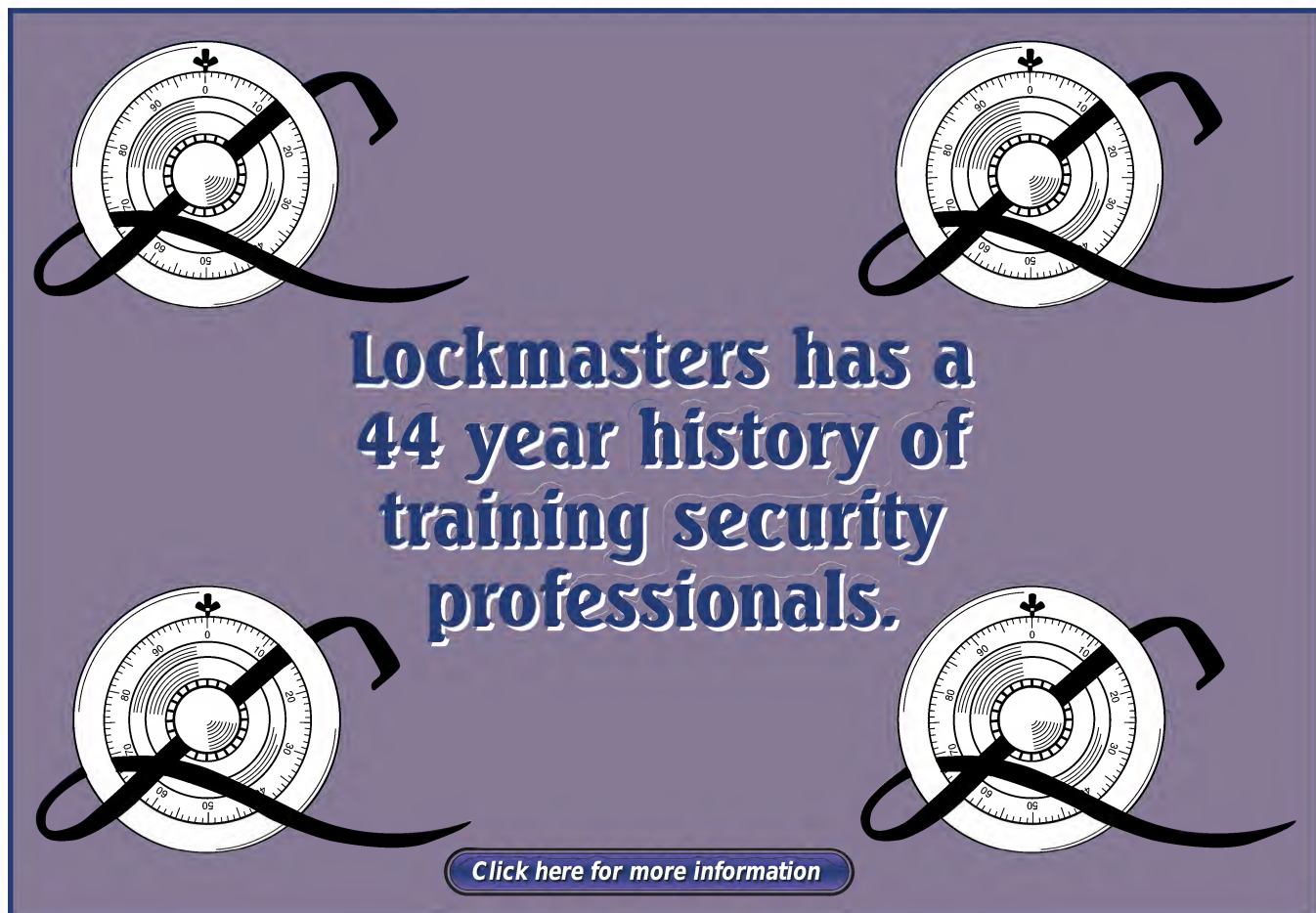
of a truck bed which is quite easy. While not completely clear in the photographs, the procedure is to back the Lectro Truck with safe mounted and strapped in place, up against the tailgate of the truck. You then raise the device up to bed level. After placing the wheels onto the bed of the truck, you raise the safe up to bed level. It is then a simple matter to roll the Lectro Truck with safe to the front of the truck and secure it there.

The one drawback to the Lectro Truck is its weight. It is heavy, weighing slightly over 200 pounds with the battery installed. However, don't let that deter you. When you load a heavy safe and begin to move the device, you will find that it is extremely well balanced and very manageable by a single individual.

The Lectro Truck has made our life easier and we believe it is much safer than the dollies we have used before. This is one of the cases where I feel comfortable in saying, Try it, you'll like it!.

For more information on the Lectro Truck call: (414) 564-6272.

IRL



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The ~~W~~HITE Side

Oops!



by
**Sara
Probasco**

"I have to go out to that new car-wash at the edge of town," Don grumbled as he gathered his stuff and headed for the door. "They brought in an electrician from out of town to install a new vacuum-machine. They gave him their key ring so he could get into the electrical boxes, and after he left, they couldn't find their key ring."

"Surely they don't suspect their own electrician of taking the keys?" I asked.

"Not in the way you mean," Don replied. "They left them in the door of one of their mechanical compartments when they unlocked it for him. They think either he may have absentmindedly pocketed the keys when he finished or he left them in the lock and somebody else took them. About that time, everybody was out to lunch."

"No kidding!" I quipped under my breath.

Don added, "Well, since it's a self-operating car wash, there's not a regular attendant on duty all the time. The point is, nobody really knows what happened to the keys. At any rate, they haven't been able to contact the electrician yet to ask him, so they want me to come re-key everything before it gets dark, just to be on the safe side."

When Don arrived at the job site, he found three locking compartments that housed various electrical wiring for their washing and vacuuming equipment. This was where the electrician had been working. However, what the owner wanted rekeyed were three keyed-alike money compartments where customers dropped in their coins in order to activate the equipment. The key to these boxes had been on the same ring as were the keys to the electrical boxes.

"What is all this?" Don asked. He was looking at rectangular metal sleeves that had been welded in around the padlocks on the money boxes.

"Oh, we put those on for better security. Somebody was always using bolt cutters, trying to get into the money boxes. Those keep people from messing with the locks," the owner said proudly.

Oh, great! Don thought. In their concern for tighter security, no one had considered the possibility of a locksmith needing to get the locks open without a key.

The locks in question were Wilson Bohannon vending-and-meter padlocks. Although they were not rekeyable locks, ordinarily Don could have impressioned or picked them open and replaced them with new locks.

However, the metal housings made it impossible to get a tension wrench and picking tools in place to open the locks. Likewise, the space was too constricted for impressioning. Seeing no code numbers visible on the locks, Don scratched his head, wondering the best way to approach the problem.

An elderly lady timidly approached the two men. "Excuse me, gentlemen. Are either of you the owner of this car-wash?" she asked.

"I am," the owner replied. "But I'm busy right now. I'll be with you in a minute."

The lady stepped back a bit, not wanting to intrude.

"Where did you get these locks?" Don asked the owner.

"Out of Austin," the owner replied.

"Why don't you try calling your source to see if they have a record of the code numbers?" Don suggested. "That would be the simplest approach."

"Excuse me," the lady said again.

"I told you, I'll be with you in a minute," the owner said again tersely.

Following Don's suggestion, the owner went to his vehicle to use his cellular phone, but he came back without any numbers.



"Since we can't get to the locks with picking or impressioning tools, and we can't cut a key by code, I see no alternative to drilling them out and replacing the locks. That is, assuming I can get to them with my drill from the top," Don told the owner.

"There's another problem," Don added. "If you want the kind of locks you have now, I'll have to order them. With this being Friday afternoon, it'll be Monday before the order will be shipped and Tuesday or Wednesday before I'll get them."

"That won't work," the owner protested. "Whoever took my keys will probably come back tonight and take all the money in the boxes unless I can remove it first. But if you drill out my locks and can't replace them now, the car-wash will be without coin boxes until the new locks come in. That means shutting my operation down over the weekend. I could lose a bundle."

"Excuse me," the lady interrupted again.

"What is it?" the owner snapped impatiently.

The lady held up a key ring and jingled the keys.

"Could this be what you're looking

for?" she asked sweetly. "My keys! Where did you get them?" the owner asked, eagerly reaching for the key ring.

"When I came to wash my car a while ago, I found them dangling from the door on that little box where the vacuum cleaner hose comes out," the lady explained. "Nobody was around, and I figured you wouldn't want these wandering off, so I kept them safe for you."

"Boy, was the car wash owner red-faced," Don said, chuckling as he later told me about it. "Over and over, he kept thanking that lady and apologizing for being so rude."

"Well, I should think so," I said.

Don was quiet for a moment, then he chuckled mischievously.

"I have a little something I think I'll take to the car-wash owner," he said.

After rummaging through a couple of desk drawers, Don finally found what he was looking for. He proudly held up for my approval a small poster, suitable for framing. It said:

"DO IT TOMORROW. YOU'VE MADE ENOUGH MISTAKES FOR ONE DAY." **TNL**



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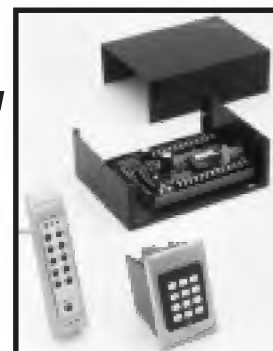
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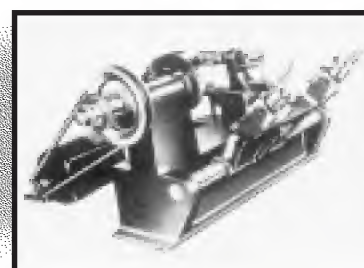
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Jake Jakubowski, Technitips Editor,
The National Locksmith, 1533
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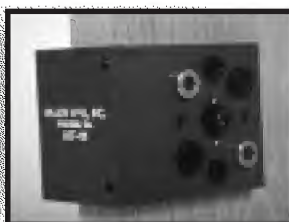
If your tip is published you will win one of the monthly prizes listed. At the end of the year, we choose winners from all the monthly tips published, that will be awarded one of the fabulous year end prizes. All you have to do to win is enter.

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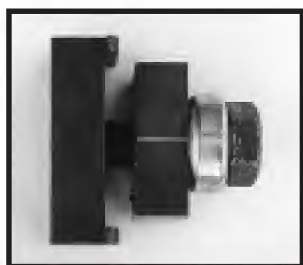
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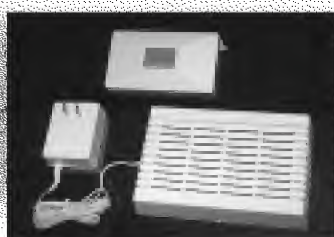
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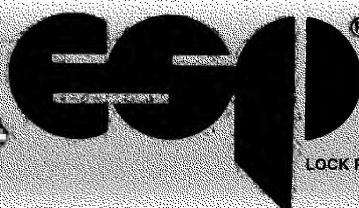
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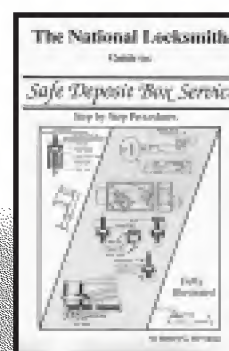


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*Tips
start
on next
page!*

TWENTIETH PRIZE: SIEVEKING SAFE DEPOSIT BOOK





**ALL LOCK KWIKIT
WINNER:
Opening Locked
Atrium Doors**

Here's how I solved the problem of opening Atrium styled door locks when they malfunction and cannot be unlocked from either side of the door.

First, to get your point of reference, you have to imagine that you are looking at the edge of the door with the door open. As you look at the edge of the door, if the deadbolt is at the bottom with the latch at the top, the drill point is always on the left side of the door. If the deadbolt is on the top with the latch at the bottom, the drill point is always on the right side of the door.

First, remove all external trim. Now, as seen in *Illustration 1*, measure in from the front side of the faceplate in line with the top of the deadbolt 1-5/8". Then measure down from the top edge of the faceplate 4-

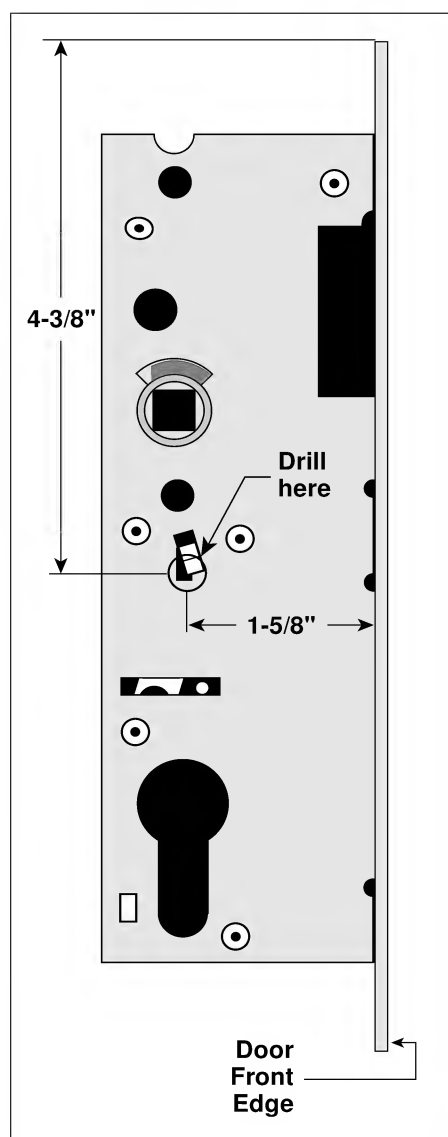


Illustration 1.

A Few Words From Jake...

There are only four more months left to the biggest and best Technitip prize year ever! That means, if you are going to send me a tip to qualify for one of the twenty-one year-end prizes that will be awarded in January, you'd best get cracking.

Speaking of tips, I've received a number of tips recently from folks that are just starting out and they tend to apologize for the fact that they are new to the trade. Let me make something clear right now. I don't care if you just installed your first deadbolt, rekeyed your first lock or have been locksmithing for twenty years, I welcome your tip. It doesn't matter if you just received your diploma from a mail-order locksmith course or just finished taking your PRP test to get your CML. If you have found a way of doing something a little easier or a little better, then I want to know about it.

So folks, sit down and write me that tip. You can E-mail it, fax it, FedEx it or send it to me by snail mail. If it's usable and has your name and physical address on it (your actual shipping address or shop address) and I print it, you will get a whole passel of goodies from me.

Y'all heah what I'm sayin'?



**by Jake
Jakubowski**

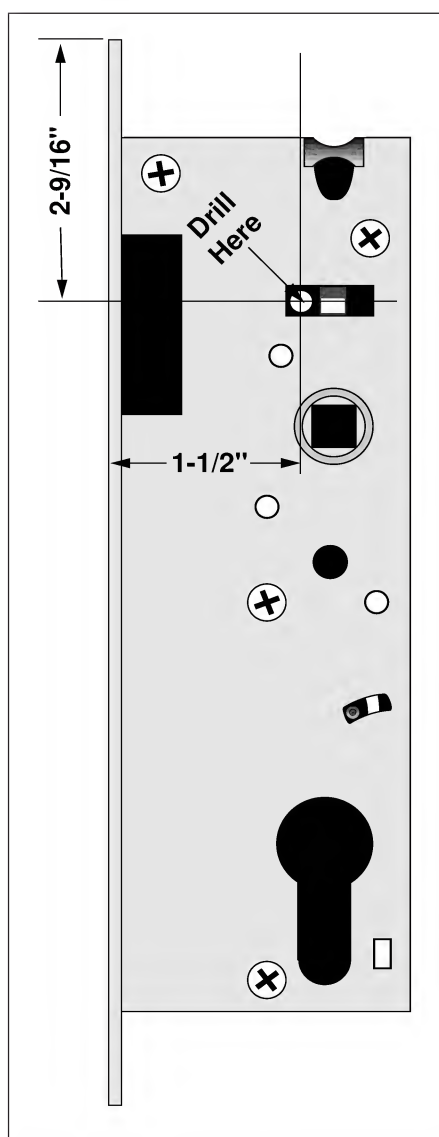


Illustration 2.

3/8". Where these lines intersect is where you drill a quarter inch hole.

Reach through the hole with an ice pick or similar tool and pry up on the deadbolt detent. While holding the detent, use a knife or small screwdriver to work the deadbolt back into the lock case.

If the spring latch is the problem, measure down 2-9/16" from the top of the faceplate or visually sight the center of the latch. Draw a straight line 1-1/2" in from the front of the face plate. Drill a quarter inch hole where the lines intersect. Again using an ice pick or similar tool, reach through the hole and work the latch back to open the door (see *Illustration 2*).

Ben Steen,
West Virginia

(Editor's Note: Atrium locks have given many a locksmith a migraine. Ben's tip should be a big help to a lot of you. However, if you want to order a new lock for your customer, they can be bought direct from: Atrium Door, 9001 Ambassador, Dallas, TX 75247. Phone: (214) 634-9663.



**AERO LOCK TRY KEY
SET WINNER:
Shim Picking Cable
Bicycle Locks**

Here's a way to open many of those pesky cable style bicycle locks with in-line combinations. First modify a Weiser shim pick as shown in *Illustration 3*. Grind away just enough material to allow shim to slide through opening (see arrow).

Continued on page 112

Continued from page 108

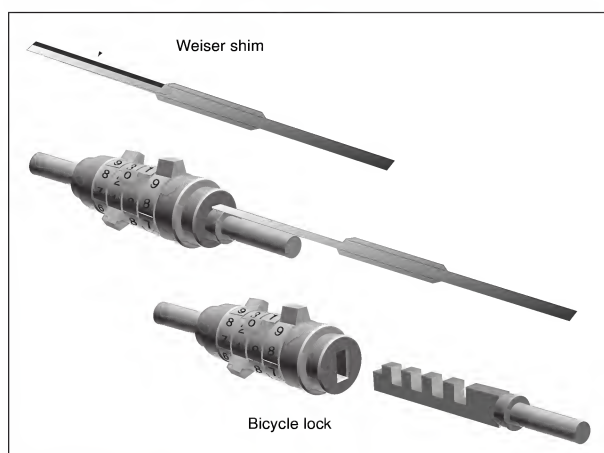


Illustration 3.

Gently push the shim in and begin rotating the first wheel. When the correct number is "dialed up" the gate will align with the opening and allow the shim to slip in and butt against the next wheel. Repeat the process wheel by wheel, until the lock is open. This is similar to shimming a 5-pin mortise cylinder.

A second option is to use an otoscope and look down through the opening. As you rotate the wheels one-

by-one, you can see and align the gates for the first three wheels. Now simply rotate the fourth wheel one number at a time until the cable releases. Either way, once the lock is open you can read the combination.

Gerald R. Bertonneau
California



STRATTEC RACING
JACKET WINNER:
**Blind Coding
Padlocks**

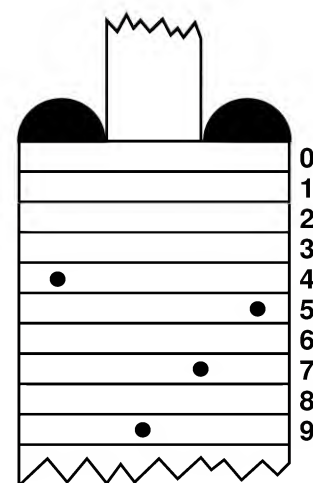
Here's a simple "blind code" system for coding Master laminated #1 padlocks (or other laminated locks for that matter after the printed code has been removed for security reasons.

NATIONAL

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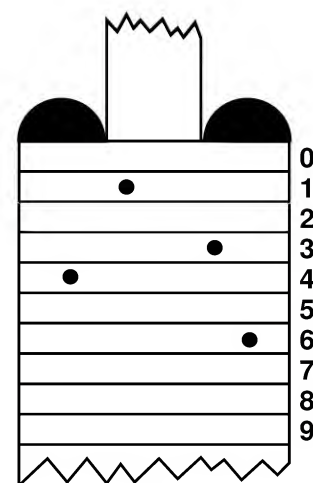
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#1
Top of Keyway

Code	Cuts
5794	6314



#2
Bottom of Keyway

(NOT TO SCALE)

Illustration 4.

Continued on page 114

Continued from page 112

Using the laminated plates as numerical digits and an automatic center punch to make small indents, I punch in my special "code" (see *Illustration 4*). As you can see by the illustration, on one side of the lock I punch in the actual code number from the top of the lock down. On the other side, from the bottom of the lock up, I punch in the actual cuts.

Since I issue dozens of locks in the facility where I work, when called to open a padlock where the keys have been lost or locked inside, it's a simple matter to hand file a key on the spot by reading the actual key cuts off the lock.

If you think the average layman is impressed with picking, you should see their reaction to this little trick.

James Lee Roy, III
Louisiana



**HPC PISTOL PICK
WINNER:
Mazda Face Cap
Replacement**

I could not find a listing for a replacement face cap for a 93-96 Mazda 626 trunk lock. Since the factory cap is very difficult to remove without damage, I needed a replacement.

I found that ASP's P20-210 cap for a Ford Probe will work with only a slight amount of modification. You need to "dress" the edge of the Mazda lock slightly since the Probe's face cap is a few thousandths smaller than the Mazda original.

Once it is in place it is necessary to seat the cap with a few taps from a hammer and punch to make it fit over the groove in the lock.

Although the P20-210 is black and the original is stainless, the lock sits beneath the taillight lens and all that can be seen is the stainless shutter.

Jim Parrie, CRL
E-Mail



**SARGENT AND
GREENLEAF WINNER:
Improving Customer
Relations**

I have found an inexpensive way of improving customer relations. Present keys and other small parts to a customer in a way that will be convenient for immediate or future use by the client.

I deliver my cut keys and small parts in a self sealing 5"x3" parts bag. I also insert in each bag a specially printed business card (see *Illustration*

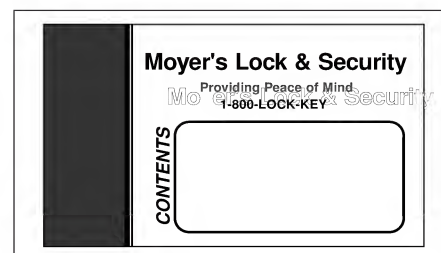
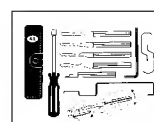


Illustration 5.

5). In addition to containing my shop name and telephone number, there is enough room on it to list the contents of the bag. The bags can be obtained from almost any stationery store or industrial supply firm. The cards were printed on my computer.

I have found that this works better than key rings, holds many types of parts and can be stored by the client indefinitely. Since my card is inside the bag, it continues to promote my company with a professional appearance.

Les Moyer,
Pennsylvania



**A-1 SECURITY
PRODUCTS WINNER:
Hollow Tube
Reinforcement**

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Continued on page 116



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Continued from page 114

by inserting steel rod stock of a slightly smaller diameter into each section of tubing. This will increase both the rigidity and anti-saw resistance of hollow tubing.

Rest the inserts on either a set screw or roll pin driven across the bottom of the hollow tubing. With round inserts, the insert will roll back and forth in the event of a hacksaw attack on the gate or window.

Conveniently, the inserts can be placed in sections from the bottom or the top to by-pass blockages. Of

course, the increased security and costs are paid for by the customer.

Jack Tom,
New Jersey



SILCA KEY BLANKS
(100) WINNER:
Almont Padlock
Rekey Shortcut

Ever rekey an Almont padlock only to have the drivers fall out? No problem (even if you don't have a loading plug or wire!).

First, empty all of the top chambers of springs, drivers and master wafers. Set the lock body on its edge with the

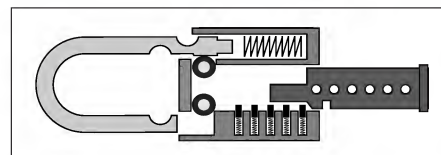


Illustration 6.

upper chambers on the bottom (see *Illustration 6*).

Use grease or Vaseline to hold the locking balls in the locked position.

Without using a loading plug (which makes this tip so handy), insert springs that are shorter than Almont OEM springs. I use springs that are about .460. Now insert drivers (approximately .80).

The spring and driver stack should not be more than .650 and as you can see in the illustration, the drives should stick up just above the shear line of the lock. Carefully set this part aside.

Next, modify the padlock plug as shown in the illustration. I use my key machine to quickly file the bevel on the plug. And, since the plug's brass, it does not hurt my cutter.

Pin the plug to the change key. Remove the key. Now, slide the plug into the lock body, using the slope that you've milled on the plug to push the drivers down into the lock's upper chambers. At the same time, hold inward pressure on the shackle so the retaining stud on the shackle clears the locking ball.

Once you have inserted the plug to the point that it has seated properly in the lock body, use the tip of the key to turn the plug to the left and you're done.

Al Bullard,
Arizona



PRO LOCK PK 15
PROFESSIONAL PICK
SET WINNER:
101 Uses For
Plumbers Tape

Plumber's Tape is a roll of almost raw rubber made into tape. It is available at most hardware stores and has a number of uses around the lock shop and van. It is flexible, can be rolled, flattened or shaped almost any way that you wish.

It is also very sticky, which makes it ideal for holding things together when you have to have a third hand. I use a couple of small pieces to hold strike plates in place while I check the bolt fit. It can be used to hold most any light piece of metal where you want while you do other work that requires two hands.

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Continued from page 116

It is faster than glue and even sticks to dirty surfaces. When done, you can peel it off as easily from metal and other surfaces as you applied it. I use a small piece attached to a 1/4" dowel rod to pick up small objects from the floor or reach inside a confined area to recover screws, nuts and bolts that I have dropped.

A small piece of Plumber's Tape placed inside a socket will firmly hold bolts and screws while you try to fit them into their proper places inside door panels, etc.

Jerry Eckhart,
Texas



**TECH TRAIN TRAINING
VIDEO WINNER:
Opening A Battery
Dead BMW**

The owner of the locked, 1990 BMW 525i had the keys in her hand but the battery was dead and she could not unlock the door.

I called BMW Roadside Assistance and they told me to use the drivers side door and turn the key counter clockwise until it stopped, then to raise the handle and turn the key farther counter-clockwise until it stopped the second time. Next, with the handle still

raised, I was to return the key to the vertical position, let the handle down, and then raise the handle again and the door would open.

I tried the same thing on the passenger side with the same results. Every time the key was returned to the vertical position, the lock button would go back down.

I then tried turning the key, raised the handle and turned the key farther. Instead of returning the key to the vertical position, I kept lowering and raising the handle while holding counter-clockwise pressure on the key. The lock button popped up and the door opened.

To return the key to the vertical position, all I did was raise the handle and rotate the key.

Ken Meade
Centre, AL 35960



**SIEVEKING
PRODUCTS GM E-Z
WHEEL PULLER
WINNER:
Extracting Broken
GEO Key**

A customer had broken the tip of his key in the ignition of his GEO Prizm in such a way that the tip of the

key was trapped behind the tumblers and the buzzer activator. I had worked a spiral extractor into the milling and tried lifting the wafers with a pick, while my partner pulled on the extractor.

Twenty-five minutes later, the tip of the key was still in the ignition and my frustration level was very high when this idea occurred to me. I don't know whether this had been done before, but I thought it would be a good tip if it hasn't.

I filed down the shoulders of a key blank and bull nosed the tip, keeping

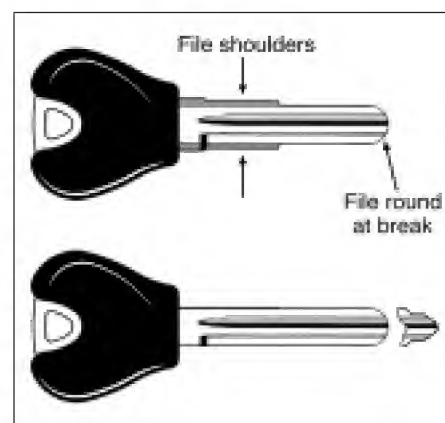


Illustration 7.

Continued on page 120



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Continued from page 118

it well rounded so it would slide into the keyway easily (see *Illustration 7*). I inserted this modified key into the keyway until it came to rest against the broken key tip in the ignition.

I then threaded my spiral extractor down the milling of the modified key blank until it stopped. Pulling gently on the extractor, I pulled the modified key and the broken key tip out of the ignition. The filed blank held the wafers out of the way while the extractor pulled the broken tip out in under five minutes!

Jim Hess,
Pennsylvania

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MAJOR
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PRODUCTS
WINNER:

Re-Inforcing Mortise Locks

A common complaint from older homes in my service area is "The knob is loose." When I arrive, I find that the lock in question is an old mortise lock (some a hundred years old) and the rose will not stay attached to the door because the wood has been chewed from constant attempts to tighten the knob (this also happens with the thumb turn).



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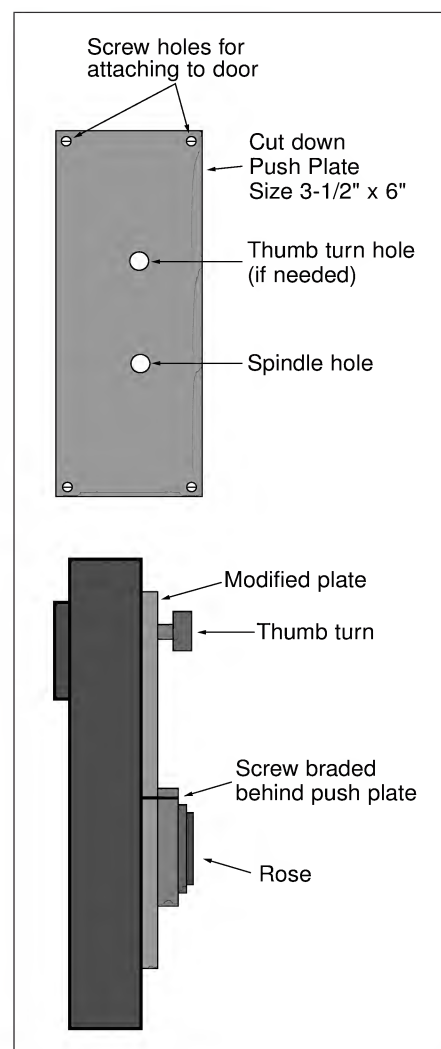


Illustration 8.

The trick is effecting a repair in such a way that the problem does not occur again and the repair is not glaringly obvious. I do that by using a cut-down brass push plate (see *Illustration 8*).

First, I cut a section of push plate to whatever length is necessary (usually about 6"). Then determine where the hole(s) for the spindle and thumb turn have to be and drill those holes.

Place the rose over the spindle hole and mark, drill and tap holes for 6-32 screws to hold the rose in place. Attach the rose to the push plate and cut off the excess screw that protrudes through the back of the plate and peen or brad the rest of the screw against the push plate. This will assure you that the rose will stay firmly affixed to the plate. Do the same for the thumb turn if needed.

All that's needed then is to secure the modified push plate (which becomes an escutcheon) to the door, reinstall the spindle and attach the knob using new set-screws.

Continued on page 122

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Continued from page 120

The trickiest part of this tip is having the proper screws on hand to do the job. I have a Plano tackle box that I've dedicated to screws that I most commonly use such as brass plated, oval head Phillips, Pan heads, etc. in various lengths and sizes.

Leo Kouligianes,
Tennessee



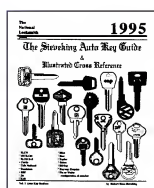
SLIDE LOCK'S "Z" TOOL OPENING SET WINNER: **Brake Line Car Opener**

Here's a new twist to the standard reach around/ reach-across type rod. While I have been using a hardened aluminum rod because of its ability to be formed and hold a desired shape for a particular job, I've recently been using brake line tubing. I find that it is lighter and stiffer for a given diameter than the rod I previously used.

By adding a long loop of thin wire (string or dental floss will work well), through the tubing so a loop is protruding from the working end of the tool and both ends of the wire is hanging out the other end, I found that I could not only use the tool to push power lock buttons, handles, etc., but now I can capture items in the loop by pulling the two ends that hang out of the back.

This tool allows me to grab small latches, levers, buttons and even retrieve items from the floor or ignition.

John Maser,
Washington



1995 THE SIEVEKING AUTO KEY GUIDE WINNER: **Opening Locked KASON Handles**

Here's how I open KASON handles without a key or picking. Take an Ilco 1000F blank and file the tip of the key as shown in *Illustration 9*.

Insert the blank into the lock and with a very light tap with a hammer, the lock will pop out and be unlocked. If the lock appears gummed up, spray a little lubrication in it and wiggle the key. Often, this alone will cause the lock to open.

Mike Noonan,
Massachusetts



JAKE'S GRAB BAG PRIZES WINNERS: **Repairing Stripped Screw Holes**

When I encounter those old door frames where the holes for the strike plate screws are all stripped out, I use small



Illustration 9.

plastic screw anchors like are used in hollow walls, etc. In some of the dollar stores, you can pick up a bag of 50, in assorted sizes for a buck. They also work great for remounting those old night latches on doors when the screws holes are stripped.

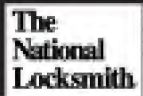
William Rydzewski,
New York

Custom Key Extractors

If you do any wood work, or know anyone who does, have them save any broken scroll saw blades for you. These thin blades make excellent broken key extractors. I prefer a #5 or #7 blade for their size and strength. A little tape on one end makes a comfortable handle.

John Carty, CRL, CJS
Massachusetts

TNL



EXL

exposé



by Dale Libby



1. EXL door label with Sentrol Alarm Detection Device.

These days, there is a proliferation of alphabet named safes, from A&B, NKL, to EXL, and I am sure there are many more that I am not aware of. I am frequently asked to open an S&G safe because the owner read the name of the safe from the center of the combination dial. So many safes are referred to by letters as well as names, that it does get a bit confusing at times.



2. Inner Doors with guard plates installed.

This month's article will cover the retro fitting of a mechanical combination lock with a LaGard swingbolt combination lock, including overcoming the relock problems. Our patient (victim) is the EXL safe made in California.

The EXL safe is a direct market safe/container sold directly from the factory to large retailers across the country. Some of the store names include Best Buy, Home Depot, and The Old Navy Store. The safe is manufactured by the parent company of U.S. Security Safe, Inc. located in Los Angeles.

Photograph 1, shows a typical label on the 6 foot high container. The problem with this safe was twofold. First, I was to replace the mechanical combination lock with a LaGard Swingbolt lock. Secondly I was to install



3. Inner door with 5 locking bolts.

Continued on page 127



Continued from page 124

guards for the inner door "T" handles that were routinely being sheared off by closing the outside door while the inside doors were slightly open.

I did the modifications to the inner doors first. EXL supplied two guard plates and the screws to install them over the "T" handles. They required the drilling and tapping of 4 screws per plate. Also supplied was a new "T" handle and cam plate to replace the

one that kept getting sheared off.

The problem arose when the individual needing access to the inner doors while counting and bundling the money would leave the inner doors slightly ajar to allow quick access. Invariably someone would need to close the outside door to get access to something behind the open safe door. This would cause the welded hinge plate on the edge of the door to move

across the open inner door and shear off the unprotected "T" handle.

Photograph 2, shows the installed guard plate on both the inner doors of this unit. The plates were the same size and installed easily and more importantly, they worked flawlessly. Both the "T" handles and the combination dials are protected from safe door abuse.



4. Typical GPC arrangement of lock and relocker. Note relock bar and cable to upper relocking spring bolt mechanism.



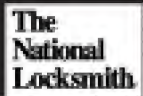
5. Spring loaded relock pin that when fired, fits into a cut out in horizontal bar keeping it locked.

Continued on page 129



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Continued from page 127

Photograph 3, shows the inside of the lower right door and the locking bolt arrangement.

The next phase of the update was to replace the mechanical combination lock with a LaGard Swingbolt lock (see *Photograph 4*). The lock is mounted Vertical Down (VD) with an adapted relock bar. The bar is drilled to accept the cover screw placement on the back of the lock with an extended relock trigger screw and nut. Also, before discussing the remote relocker on the bar above the main central bar of the safe door mechanism, a little should be said about changing the hand of the LaGard swing bolt series locks.

These locks — the LaGard Series 5000 — can be ordered right and left handed with the appropriate swing (flat) position. It can also be re-handed in the field. There is a big difference between working at a work bench with flat space and good lighting, and working in a busy office without any flat work space. On this job I had to re-hand the bolt.

No matter how careful you are, there are always complications when doing this in the field. Instead of packing up all my tools and going back to my truck (about a 1 mile walk), I decided to change the hand of the lock on site.

No matter how careful you are, there is always a chance of losing the tiny solenoid spring when moving the solenoid unit from one side of the lock case to the other. Luckily, Lockmasters sells packages of these irreplaceable springs at a very reasonable price (when available).

Looking at the lock from the inside of the door as shown in *Photograph 4*, we can see a cable attached to the relock detent screw. This is a finely



6. Depressing the relock pin with a 1/4 inch nut and bolt.

braided air craft cable and is secured with a ferrule. This must be attached with a crimping tool at both ends of the relocker. (I love adding new tools to my vast collection.)

Photograph 5, shows the non-retained spring loaded bolt in the bolt guide above the combination lock in the upper bar. The bolt must be depressed while installing the cable ferrules. This was easily accomplished by threading a 1/4 inch nut and bolt in the hole as shown in *Photograph 6*. Just thread the bolt in the hole (provided) above the bolt with the nut inside the hole.

Once the relock pin is depressed, secure the ferrule to hold the pin down, then remove the nut and bolt and reinstall the vertical locking bar with the cut-out in the proper place. All inside bolts are held in place with large hex head cap screws.

Photograph 7, shows the completed installation of the LaGard key pad on the EXL door. Other than the working conditions, this job was easy and straight forward. The addition of the inner door guard plates solved a chronic problem that the safe manufacturer was having with these units.

OPEN, Retrofit, and Prosper! **INL**



7. Completed retrofit with a LaGard push button key pad.

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VIEW POINT: A New World Order

by Sean DeForrest,
President, American
Security Distribution



I've been speaking and writing publicly for years predicting that our industry was headed for a period of unprecedented change. This is no longer a prediction! The security industry has entered into a new era which will radically redefine the roles and functions of the participants in our industry. This is a time like no other in our industry's history, for it will create tremendous opportunities for many dealers and distributors. Unfortunately, it is also a time of great risk. For distributors, it's already clear that many will not survive in this new world order. More on that subject later.

For locksmith professionals, the future doesn't carry quite the same risk. Locksmith professionals have technical skills and offer services that are absolutely critical to the needs of security conscious consumers. In addition, locksmith professionals are much more flexible, have many more options available to them, and can adapt much quicker to the new environments of the future than distributors. In the new world order of tomorrow, locksmiths can create marketing niches where they can be successful or participate boldly in the delivery systems that are emerging today. Distributors have far fewer options.

What evidence do I have to claim that we have entered into a new era in our industry? The following are just a few important events that have already occurred which mark the beginning of this new era:

q The largest commercial hardware manufacturers are now owned by just three companies: Ingersoll-Rand, Assa Abloy, and Williams. Unlike the old door hardware companies I grew up with, these firms are well financed, run by "outside professional management" and have set aggressive sales goals for their operating presidents. What companies do these three titans control? Brand names such as Schlage, LCN, Von Duprin, Glynn Johnson, Falcon, Monarch, Dor-O-Matic, Yale, Corbin Russwin, Rixson, Norton, Folger Adams, Sargent, and Arrow just to name a few! That's not all! These three companies are continuing to look at additional acquisitions on a worldwide basis and we will see continued acquisitions over the next several years.

q A second change that has occurred is the industry is now willing to look at new ways to

distribute products, all with the objective of being more effective at serving the commercial after market customer and increasing sales. The most dramatic example of this change in strategy was Medeco's radical decision to sell locksmiths direct. The reason for their change is that by eliminating inefficient distributors, at least in their eyes, they could "open the channel" and thereby help locksmith professionals sell more high security products and services to the end user. However, Medeco isn't the only company evaluating their distribution system. Schlage has already made the decision to change the roles and the structure of their "after market" sales organization.

While Schlage will certainly NOT sell locksmith professionals on a direct basis, like Medeco, it is also quite clear that they are not happy with the current distribution network and they are going to change their current after market delivery system. What the new structure will look like is still a big question mark, but this change represents a huge step towards a new way in which Schlage will market products.

q Also taking place is the growing merger between the electronic security market (alarms, CCTV, etc.) and the mechanical security market (locks and door hardware). This merger can be seen at the manufacturing level as more traditional door hardware manufacturers introduce electronic or access control products. It can

also be seen at the dealer level with such obvious attempts by the alarm industry to regulate the industry. In addition, locksmith professionals are entering into the electronic market themselves. Some aggressively, others through informal "joint ventures" with alarm companies, and still others through outright mergers with alarm dealers.

Just as manufacturers and dealers are entering the electronic security market, so are distributors. For example, in many cases American Security Distribution's largest competitor for locksmith business is not a traditional locksmith distributor but a national alarm distributor, ADI.

My final point is, distributors are in trouble. Distributors make much less income, on a percentage basis, than locksmiths or manufacturers. When changes hit the market and have an adverse impact on distribution, distributors are much less capable of surviving the change. Medeco's decision to sell direct took a tremendous toll on some distributors. Other manufacturers will also "clean up"

their distribution further, taking away sales opportunities from distributors. In addition, distributors are struggling to upgrade their service performance through better computer systems or better customer service response. All of this requires huge financial investments and is putting tremendous strain on distributors as they try to survive in this new competitive environment. The little "secret" that no one wishes to discuss in the industry is that, in general, distributors are NOT making enough profits to keep up in this new world order!

The result will be a dramatic increase in the number of acquisitions and mergers at the distribution level. Another outcome will be a growing number of distributors will abandon all pretenses of just selling "wholesale" and will compete with locksmith professionals for the much sought after commercial end user with no regard to a sales policy.

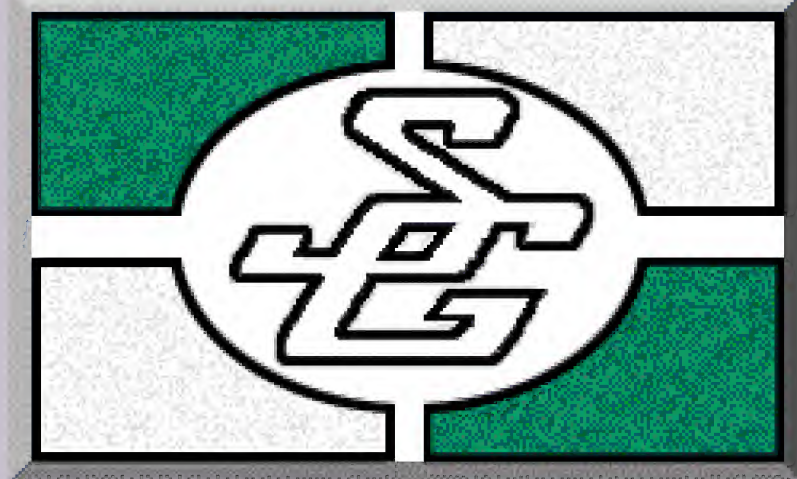
Conclusion:

Fortunately a small number of distributors are taking the necessary

steps to participate in the new world order that is being created. Those distributors with the vision, leadership, people, and more importantly, the resources to make changes to adapt to the new economic environment will emerge as major players in our industry. What those few distributors will bring is an entirely different way business will be conducted, which will provide security dealers tremendous opportunities to be successful.

What these new systems will look like is still not clear. What is clear is the locksmith has taken a radical departure from the way business has traditionally been done and is on the verge of seeing many manufacturers (with distributor support) introduce entirely new methods of getting product to the commercial end user with the locksmith as a major part of the system.

The next few years will be filled with incredible and unprecedented opportunities for many members of the security industry! **TNL**



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THRU THE KEYHOLE

A Peek at Movers & Shakers in the Industry

ATTENTION MANUFACTURERS AND DISTRIBUTORS:

Would you like your company and products to be profiled in *Thru The Keyhole*? Please call Editor, Greg Mango, at (630) 837-2044.

Hurd Corporation — I Thought They Were Gone?

By now most people in the locksmith business know that Hurd Corporation no longer is the manufacturer of production Ford lock sets. But did you know that Hurd is one of the largest manufacturers of industrial locks in the world! Most locksmiths are unaware that Hurd Corporation is alive, well, and growing in the lock business. We want to do business with you!

A dynamic change in management and business direction at Hurd Corporation has opportunities for the locksmith written all over it. Hurd

Corporation and Automotive Security Products (A.S.P.) have formed a partnership with one goal in mind: make every lock available for every Ford vehicle produced in the last 10 years.

Quoting Buddy Logan (owner of A.S.P. Corp.) "We want the full line, not just one or two items like some other manufacturers are supplying. The locksmith needs the hard to find items just as bad as the easy to find items. We will have everything the locksmith needs for Ford lock repairs."

This commitment by Hurd Corporation and A.S.P. means you will now have the opportunity to buy all the Ford parts and lock sets you need from your current distributor. Locks previously available only from a Ford dealer will now be available through your favorite distributor. Before you call a dealer for a Ford part, call your distributor and see if they have it in stock from A.S.P. You might be surprised to see what's already on their shelves.

Within a few short months, many more Ford items will be available to you through A.S.P. and your local distributor. Stay tuned to *The National Locksmith* magazine and distributor catalogs for updates on these new items.

Many locksmiths have already received Hurd's Industrial Lock Catalog. A direct mailing was made to 1,500 locksmiths several months ago. This is another opportunity for the



locksmith to find easy access of previously hard to find items. Cam locks, plate locks, tubular locks, and padlocks are only a few items available in this catalog. Special items such as levers, hardware and unique key codes can be matched and mailed factory direct to you in five working days.

New items will be added to the Hurd catalog with every printing. Postal locks, cabinet locks, and reversible key cam locks will appear in Hurd's next catalog issue.

Many new locksmith items are being completed by the A.S.P. research and development staff for release later this year. A.S.P. will announce such occurrences in *The National Locksmith* on new products for locksmiths.

As you can see, Hurd Corporation is far from gone. Working in A.S.P.'s 100,000 square foot manufacturing plant located in Greeneville, Tennessee A.S.P. will continue to develop new products for the locksmith industry. If you would like a catalog call A.S.P. at 1(800) 877-2581. A.S.P. would be happy to hear from you. If you ever happen to be in Eastern Tennessee, stop by and say hello. **TLN**



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Reed Report

Well, folks, it's August, so that means it is time to start thinking about Reed/Young Seminars for 1998. It really doesn't seem like a year ago that I was saying I was going to cut back on the shows for '97. Anyway, I'm going to cut back on the number of shows for '98. Now that I have that said, and soon as you are through laughing, I'll go on. Steve and I have definitely decided to slow down in 1998. We have traveled over 200,000 miles in the past three years, and well over 1,000,000 miles since we started the seminars. It's time to slow down.

As you are reading this I have booked one show for '98. On March 21st we will do a show in Hawaii. I plan to book six more shows. The rules remain the same. We will only do association sponsored shows, and have a raffle and donate all proceeds to the association.

Q. I am new to the industry and still trying to stock my shop. What are tryout keys and are they necessary? How do they work? Do you think being new to locksmithing that I could handle them?

A. Yes, you can handle them. With every set of tryout keys comes COMPLETE and easy to understand instructions. Since you have not used tryout keys before, it may help to practice first on a lock you have keys for. This will give you the feel of how much turning pressure is needed and help develop the technique you find most useful. Tryouts will only work in a non functional lock. If the lock is full of dirt, or has stuck pins or bent wafers, the tryout keys will not work.

Q. Would you please give me some information on Tri-Mark key blanks?

A. In order to determine the specific key blanks or master keys needed for your various key applications, check out this key guide. The keys are listed by Tri-Mark part numbers. A description of each key is also listed which provides the key style and the key code ranges that they cover. If you need more information, you can contact United Group Distribution Center, 13800 Laurel Dr., Lake Forest, IL 60045.



Yours For Better Security,

Bill Reed
Bill Reed

Scatter Shooting while wondering whatever happened to . . . Arnold Fried

Blanks:

1. 14264-07-2001 C style blank - K103
TM 051-100, 500-513,901-950
2. 14264-08-2001 D style blank - 7232 TR051-100
3. 14264-04-2001 E style blank - K101 TM 101-150
4. 14264-06-2001 E style blank - K102 TM 151-200
5. 14264-01-2001 F & B style blank - K104
TM 201-250 & TM 001-050
6. 14264-03-2001 G style blank - TRI TRI001-100
7. 81205-3 Security Deadbolt Blank 5001-6000
8. 14472-05-2001 H style blank - TRK2 TM 301-323
9. 14472-07-2001 J style blank - TRK2R TM 426-448
10. 14472-09-2001 K style blank - TRK3 TM 851-867

Masters

11. 14264-02-2002 C Master Key
12. 14264-05-2001 D Master Key
13. 14264-02-2003 E Master Key
14. 14264-02-2004 F Master Key
15. 14264-02-2001 B Master Key
16. 14472-06-2001 H Master Key
17. 14472-10-2001 K Master Key

Depending on the key code, cut/bitted keys are available from the address above. There is NOT a master key for the G style key or the deadbolt key. **TRI**

**If you'd like to attend a Bill Reed seminar,
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Aug. 23	Dallas, TX	Oct. 18	Minneapolis, MN
Sept. 20	Toronto, Canada	Oct. 25	Indianapolis, IN
Oct. 4	Akron, OH		



KEY CODES

1997-98 Buick Park Avenue 0001-1988

Lock Manufacturer:

Huf 10-Cut Key Code Series

Key Blanks:

GM Part #: 2852088 - Master

GM Part #: 2852089 - Valet

Ilco Master: B97PT

Ilco Valet: B98PT

Tip to Center of First Cut: 1.034**Cut to Cut Spacing:** .092**HPC 1200CM:**

Code Card: CF215

Curtis:

Cam: GM6

Carriage: GM6A

Continental Micro:

Card: XF215

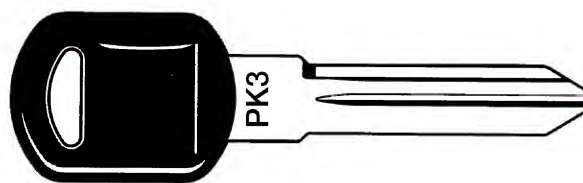
Framon:

Cut Starts at: .216

Spacing: .092

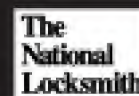
Block #: 3

Increment: .025



Spacing:		Depths:	
1. .206	6. .666	1. .315	
2. .298	7. .758	2. .290	
3. .390	8. .850	3. .265	
4. .482	9. .942	4. .240	
5. .574	10. 1.034		

1 3331213434	35 3342312342	69 3331243442	103 3342331312	137 2432334442	171 3343321312
2 3311224213	36 3334224224	70 3332132312	104 3313344442	138 3312433112	172 3342322442
3 2443233424	37 3334224224	71 2443313342	105 3333422322	139 3311234422	173 3334233432
4 3342244322	38 3333211342	72 3322211342	106 3313443242	140 3343311344	174 3342124422
5 3333442344	39 3311234312	73 3342223312	107 3312423322	141 3342313222	175 3312444422
6 3342112123	40 3323223342	74 3322312432	108 3311231122	142 3342432312	176 3331124443
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10 3331132344	44 3313422433	78 3311342332	112 3333224342	146 2432311232	180 3322313242
11 3323311322	45 3312332442	79 3123332442	113 3313323122	147 3331211232	181 3113432242
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14 3321221342	48 3342423112	82 3342134342	116 3131133132	150 3322434312	184 3344223244
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16 3343422313	50 3343112112	84 3332224442	118 3323443342	152 3312123112	186 3344333442
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21 3333224213	55 3344243332	89 3334433242	123 3312213442	157 3342133134	191 3312243342
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30 3113333242	64 3342234334	98 2434324234	132 3324244344	166 3322233124	200 3343242244
31 2431322444	65 3322333442	99 3333112212	133 3323111344	167 3133123344	201 3123431244
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33 3323343442	67 3334234234	101 3324233234	135 3334422334	169 3331232113	203 2442331332
34 3323311212	68 3332442222	102 3331122313	136 3112333342	170 3311311332	204 2434332424



1997-98 Buick Park Avenue

0001-1988

205	3333112342	268	2431332342	331	3331111222	394	3323224442	423	2443231244	452	3331233122
206	3333243242	269	3324342332	332	3123132242	395	3322133134	424	3321344342	453	3323424223
207	3311323122	270	3131133312	333	3321343442	396	3313324422	425	3342133422	454	3324432422
208	3323312223	271	3342344442	334	3322321342	397	3312244442	426	3322223312	455	3342312122
209	3343213112	272	3113432442	335	3333221312	398	3312434213	427	3113342332	456	3313313422
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225	3342423332	288	3113232442	351	3332423342	414	3312233312	443	3313124312	472	3313112432
226	3123132112	289	3133231213	352	3344323342	415	3324223332	444	3311333442	473	3333113242
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244	3312433312	307	3311323342	370	3343423213						
245	3311242344	308	2443334222	371	3342421112						
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248	3342133242	311	3321224312	374	2433334213						
249	3322221312	312	3332242334	375	3311344422						
250	3342223442	313	3312334242	376	3323342232						
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253	3331212242	316	3323421322	379	3322422324						
254	2431321324	317	3322331312	380	3321134442						
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256	3321323312	319	3133432424	382	3313311132						
257	3342122113	320	3312223342	383	3331242232						
258	3322113442	321	3332213442	384	3343122322						
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261	3344322424	324	3343124233	387	3342233212						
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266	3334434232	329	3312123423	392	3323123422						
267	3133123434	330	3332123312	393	3342443422						



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481	3312431133	544	3323424332	607	3343113342	670	3323112113	733	3313113242	796	3312123442
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484	3123434213	547	3322443422	610	3321324342	673	3132133342	736	3343123312	799	3323122213
485	3322423113	548	3321243342	611	3313223442	674	3312244244	737	3323321312	800	3133434223
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496	3332112242	559	3311233342	622	3331122132	685	3321334422	748	3313342223	811	3312422442
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540	3342123124	603	2433311224	666	2432324342	729	3343311124	792	3321224224	855	3133423312
541	3133223312	604	3332223342	667	3331221224	730	3323442222	793	3334422442	856	3312211313
542	3333423442	605	3331124223	668	3123334223	731	3322423332	794	3321323113	857	3332134422
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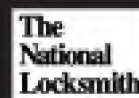
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862	3342322132	925	3332431112	988	2431334212	1051	3331212442	1080	3331213234	1109	3133213342
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864	2431322333	927	3311234242	990	3331133442	1053	3322312212	1082	3331233212	1111	3312211242
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866	3332112442	929	3343123223	992	3313442232	1055	3333422344	1084	3322344422	1113	3343324213
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869	3321342342	932	3313423113	995	3313112342	1058	3312242332	1087	3332431244	1116	3321234233
870	3322313224	933	3312333122	996	3311313312	1059	3344334234	1088	3344334342	1117	3313124422
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872	3311234442	935	3331211344	998	3344243224	1061	3342211234	1090	3311133134	1119	2431322243
873	3331244232	936	3342431122	999	3322423424	1062	3342313242	1091	3343213423	1120	3343211242
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876	3342334213	939	2442133334	1002	3133431122	1065	3311344244	1094	3334424224	1123	3342313112
877	3334423234	940	3333244342	1003	2432342342	1066	2431344332	1095	3312342322	1124	3334224334
878	3342211343	941	3332222442	1004	3331224233	1067	3324424322	1096	3324433342	1125	3132431332
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882	3131232332	945	3342342423	1008	3313312232	1071	3333212312	1100	3322134233	1129	3343124322
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884	3322342422	947	3321331122	1010	3313421113	1073	3331244342	1102	3321134222	1131	3322312122
885	3321131322	948	3313224213	1011	3312323422	1074	3311332342	1103	3332231134	1132	3313423442
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887	3332424312	950	3312332312	1013	2443132442	1076	3342334322	1105	3324342224	1134	3113132213
888	3344324243	951	3324422432	1014	2443334242						
889	3331132124	952	3342244232	1015	3322234243						
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919	2431321344	982	3311231212	1045	3342312432						
920	2443134242	983	3123134443	1046	3342432222						
921	3323342342	984	3334242242	1047	3321123424						



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1135	3331221112	1146	3323123442	1157	2431332122	1168	3342243213	1179	3313421132	1242	3313242433
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1190	3131233232	1253	3323113322
1191	3343113322	1254	3323312112
1192	3321231224	1255	3334444222
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1997-98 Buick Park Avenue

0001-1988

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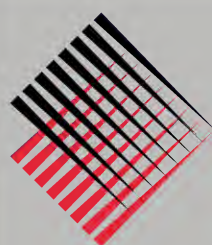
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Continued from page 142

1997-98 Buick Park Avenue 0001-1988

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Continued from page 144

1997-98 Buick Park Avenue 0001-1988

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TNL

Delayed Egress Systems

by David Halls

The 8310-101 single door and 8320-101 double door NFPA-101 approved delayed egress systems by Rutherford Controls.



In October of 1991, a chicken processing plant in Hamlet, North Carolina became the setting for one of the worst industrial accidents in American history. Twenty-five people were killed and fifty-six injured in a fire which gutted the facility.

According to NBC News' "Dateline" broadcast of October 27, 1992, this tragic loss of life was caused by exit doors that had been chained and padlocked. Those same doors, meant to provide easy escape from this raging fire, had been locked in an effort to prevent pilfering by employees. Those chains also resulted in the owners conviction on involuntary manslaughter charges and the eventual bankruptcy of the firm.

It is quite common to have similar contradictory problems in many facilities. Specifically, adhering to fire regulations for life safety while at the same time deterring theft (from customers, visitors and employees). Shrinkage and theft result in tens of billions of lost dollars from almost all types of businesses. These include convenience stores, retail stores, factories, educational, health care, institutional, government, military facilities and more. The solution to this difficult situation is through delayed egress systems.

In very basic terms, a delayed egress system is exactly what it's called. It is a system that does allow egress, but delays it. The standard

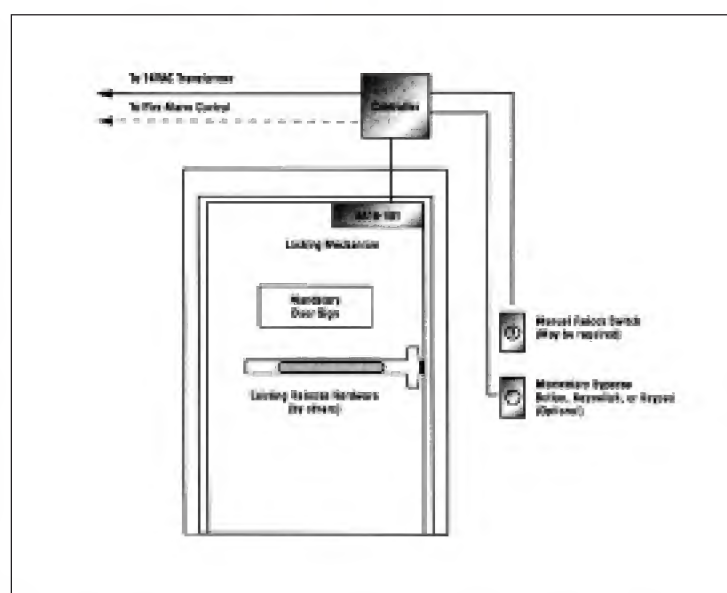
idea is that someone tries to exit the door (but it is locked), usually an alarm sounds almost immediately, and after a period of time (15 seconds is the standard) the lock will release and allow egress. The delay allows sufficient time for a guard, receptionist, clerk, nurse, etc., to respond to the door to find out who is trying to exit and why.

There are two classic examples when this type of system makes sense. First is in a warehouse outlet. In these facilities, someone could run out a back door with a cart full of valuable products, jump in a waiting car and be gone, long before anyone responded to the normal "alarm will sound" type products. The second great application is the managed care facilities. The liability involved is tremendous. If a patient wandered out the door and is hurt or killed, the liability awards are staggering. Both these examples can easily be controlled through the use

of a delayed egress system.

Most of these systems are manufactured using magnetic locks and are available from such companies as Rutherford Controls, Locknetics, SDC, Rofu, Dynalock, Securitron, etc. There are also some "mechanical" delayed egress systems manufactured by Von Duprin, Alarm Lock and Detex. While all systems accomplish roughly the same function, they are achieved through various means.

Regardless of whose product you use, and how that product accomplishes the function, this is a market that is highly technical with



A. For single door applications the 8310-101 system offers stand alone delayed egress control.

Continued on page 150

Continued from page 148

lots of regulatory barriers. Not only must you work with UL and the building code, but you may have to consider NFPA 101, UBC, BOCA, etc. Depending on where you are installing the system, you may have to conform to one of these regulations. The primary difference is in the timing sequence.

There are three timing functions that must be addressed.

First is the nuisance delay. If the system did not have a nuisance delay of some sort, every time someone just "tried" the door to see if it was in fact locked, the alarm would sound, the irreversible timer would start, and the door would unlock after the full timing sequence.

With the nuisance delay, the person trying to exit the door must push on the door/lock for a period of time (usually two or three seconds). If they continue to push on the door for the full few seconds, only then will the actual egress delay system initiate, sound the alarm, count down and unlock the door.

The various systems include signs that actually state "push until alarm sounds, door can be opened in 15 seconds." This nuisance can eliminate a lot of false alarms by ensuring that the person does actually want to get out that door.

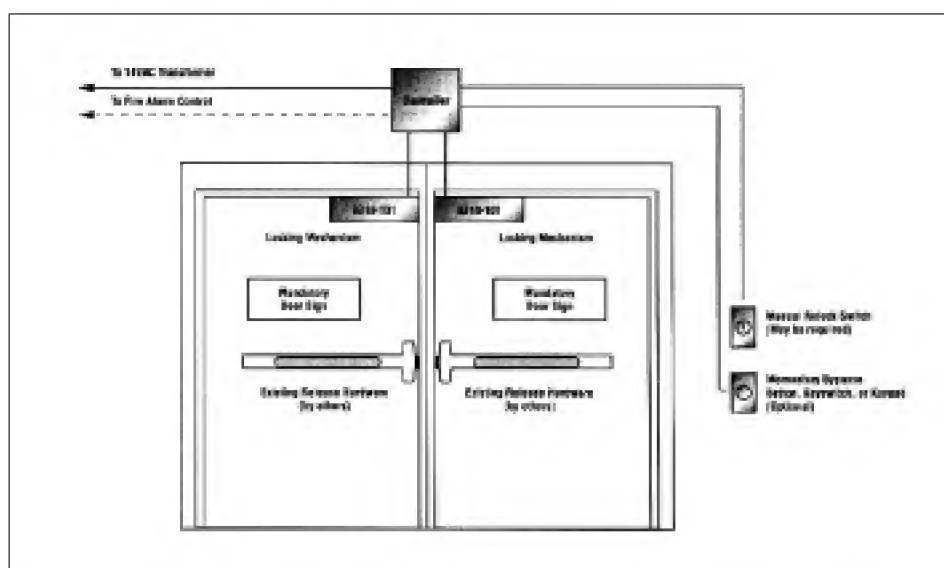
The second timing feature is the opening time. This is how long it takes for the door to actually unlock. The most common timing is 15 seconds from the initial try at opening the door. Therefore, if the system has a nuisance delay of three seconds, then the opening time would be 12 seconds, to give a total timing sequence of 15 seconds. Note that 15 seconds is by far the most predominate time delay. The code does allow 30 seconds under some special circumstances, but you must get special approval for this extended delay.

The third timing feature is a relock cycle. After the lock has sequenced and the door is unlocked, how or when is the system reset (alarm silenced and door relocked)? Some applications allow the system to reset as soon as the door closes. Some applications allow the system to reset after a period of time once the door is closed, and some systems require that the system must be reset manually.

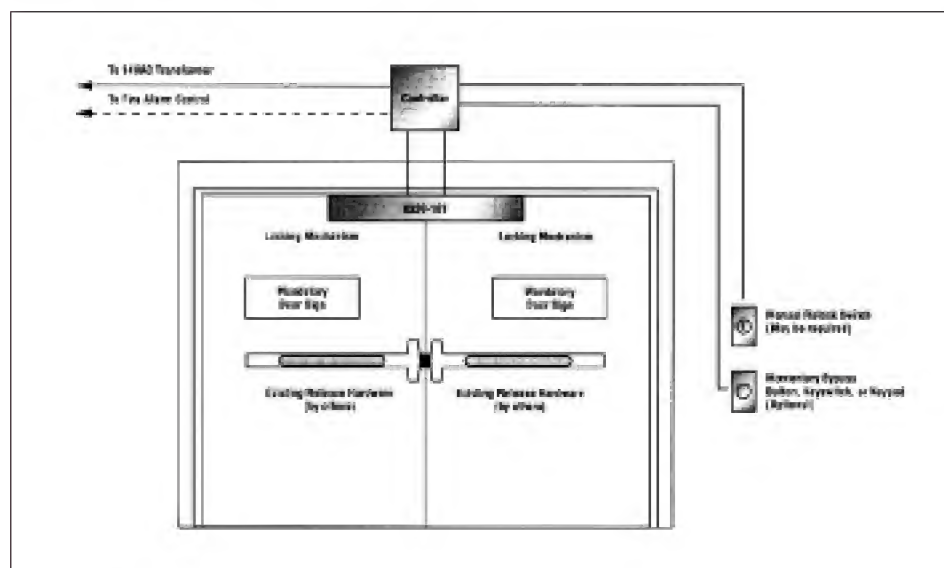
	Nuisance Delay	Opening Time	Relock Cycle
NFPA 101	3	12	manual
BOCA	1	14	30
UBC	2	13	manual
MIRA*	3	12	10
Irreversible	0	15	instant
Modified Irreversible**	3	12	10

* System will reset in 10 seconds even if the door has not been cycled.
** The door must be cycled before the 10 second reset will function.

B. Various timing sequences used for delayed egress systems.



C. For pairs of doors separated by a center mullion, the 8310-101M is available. The configuration features the same versatility as the 8310-101 utilizing two single electro-magnetic locks for pairs of doors. These two doors will run on the same timing electronics, and will operate in unison. Both doors go into alarm and unlock simultaneously when either exit device is depressed.



D. For pairs of doors with no center mullion, the 8320-101 is available. This configuration features the same versatility as the 8310-101 utilizing a double magnetic lock for pairs of doors. These two doors will run on the same timing electronics, and will operate in unison. Both doors go into alarm and unlock simultaneously when either exit device is depressed.

Illustration B, is a breakdown of the various timing sequences used. Note that they all have a total opening time of 15 seconds, but can be produced with a 30-second delay if requested.

You must check with your local authority having jurisdiction to find out exactly which timing sequence they want or will allow in your area. Note that some manufacturers allow you to adjust the timing sequence in the field. While this may be convenient, it is not recommended. The liability issue of tampering with what is required by the Fire Marshall is too great. Do not allow yourselves to be put in the potential liable situation. Find out what sequence is allowed, and order that product preset from the factory.

While all manufacturers adhere to the various timing sequences required by code, they all have different methods of initiating the delay. Some systems require a special exit device that once pushed, sends a signal to the system to initiate timing. This works very well, but requires that you remove the existing mechanical hardware already on the door.

Most magnetic lock systems have an armature assembly that allows the door to actually open a small amount (less than 1/2 an inch) when the door lock is turned/pushed. There is then some type of switch that recognizes this small amount of door movement and initiates the timing. There are many different types of these indicators including limit switches, optical sensors and plungers. Use a system that uses a standard magnet and reed configuration. After all, alarm companies around the world install literally millions of these types of contacts each year and this indicates the high level of reliability.

It is recommend that you use a system that has all the sensitive electronic timing equipment in a separate housing. This is especially important on any door that is also being used as an authorized entrance. Each time the door cycles, the magnetic lock is jarred or vibrated which can affect the electronic circuits. It also makes installation much easier if the electronics is in the power supply. This opens up the circuit board allowing normal size wire and tools for much easier connections.

Note that most systems also accept inputs from other devices to allow authorized entrance and egress. This would unlock the door immediately, but not sound any alarm. These systems also must be connected to the fire alarm. In the event of a fire alarm, the doors will unlock immediately.

While these systems may be slightly more complicated than standard magnetic locks, they are well worth the effort. The savings in loss/theft prevention and potential liability can often pay for a system in a very short period of time. Take time to talk to your customers about this exciting product. You'll probably be surprised at how many applications you can come up with.

David Halls is the Vice President of Rutherford Controls Inc. Rutherford Controls manufactures and imports a full line of electric locking products and accessories. For further information call: 800-899-5625, Canada (519) 621-7651.

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NO HOLDS BARRED

by Joe Bucha, CML and
Dee Bucha, CPL

A fellow Texan flagged me down at a recent convention and asked, "Where's Joe? Still in jail? Haven't heard or read a word from you or Joe in a coons age." Actually Joe was in Chicago at the time! Still teaching! Same subject; different day; different group, but doing what he does so well: building excitement about a subject he loves.

For the friends we haven't yet met, the specialty field of detention locksmithing chose us many years ago. And for the record, neither of us has ever been on the wrong side of those bars. Honest! Joe and I hadn't realized how very long it had been since we dropped our friends a note until that fellow Texan flagged me down and inquired.

Joe and I jointly set a goal several years ago to do our dead level best (while we're still alive) to meld two segments of the same industry for the security and well-being of both. We said it in the 80's and we'll say it now: serious security calls for professionally trained locksmiths.

Some state jails and prisons have fully qualified, factory trained locksmiths handling their security. Taking nothing away from Government (or from those who are professionally trained law enforcement agents), every state does not have trained locksmiths on staff at every facility. Often, a correctional officer is placed in the position of being appointed to care for locks, or

armaments, or communications, as a "secondary job."

As professionals, you (and we) know there is nothing secondary about security. Without a wide variety of locks, perimeter control, burglar and auto alarms, access control and the many existing forms of security defense, we would live with anarchy, not democracy; and something tells me neither the honest nor the meek would inherit a thing.

The government, with all its many good intentions, recently learned that the hard way in a very large state prison complex. I will give no names here because our objective is not to point fingers or to place blame or shame. That particular prison was closed for total renovation and all prisoners were reassigned to other facilities in the region, following an inspection by state authorities. The inspection was performed following the death of a correctional officer in this particular incident. The inspectors found there was no security.

Locks were broken, or were not being used. Inmates had keys. Important keys. They were controlling the prison. One has to wonder if they were on the verge of controlling the guards. Now, that's scary!

Any comments on how this came to be or what process created such a security breach would be pure speculation. The end result is frightening, however. A prison sentence is supposed to ensure a firm

delineation between the lawless and the lawful. The first line of defense must be locks. Big locks. Baad locks. Maximum security locks.

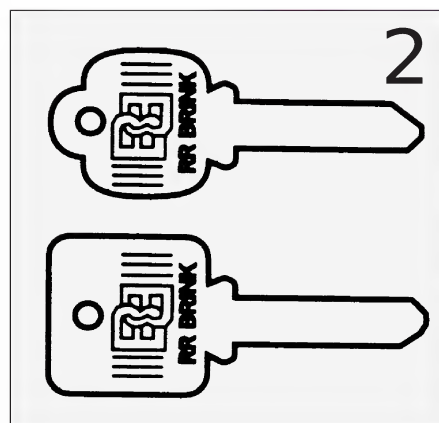
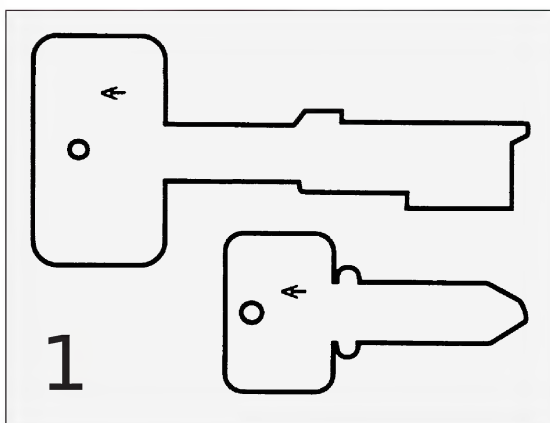
This, as most professionals know, is not enough. Hence, the necessity for a merger between maximum security and high security and the requirement for bringing these two industry segments together.

In the past, we approached the goal from several angles. We traveled. Joe taught. I wrote. We talked to: correctional officers, jail administrators, locksmiths, manufacturers, architects and engineers. Several problems were isolated. We gained a small measure of success, but, frankly, we want a larger measure of success in reaching our goal. So in keeping with our winning philosophy, "If it doesn't work, stop doing it and try something else...", we're trying something else.

We're determined to make the full trip, and have agreed to arrive at our destination by way of a different route than we originally planned. I don't mind telling you that some of the best trips we've experienced were on the roads we "discovered by accident," rather than by design. This is one of those discoveries...and we fully intend to enjoy the new challenges on this particular journey.

As an often misquoted poltergeist recently said a few short years ago: "We're ba-aaaack!" And we want to add to that: we're centered, we're

Adtec keys shown in Illustration 1, have a bow which is rectangular in shape and the company name is usually embossed on the head of the key.



RR Brink company uses standard builders hardware cylinders, such as Best, Corbin, and Medeco.

focused and we're well on the way to that new approach.

If you're interested in learning, "No Holds Barred," about detention locks, their sales, service, identification and design, get ready for some dialog...and jot down some numbers so you can find us should you need us.

Toll free telephone: 888-556-5625, Fax: 512-358-0660, Email address: Jailock@bweb.net. You will reach either Joe, Jenni or myself, answering the phone as "American Security Distribution Detention Division."

For those of you who don't know, Joe is the National Sales Manager for

American Security Distribution's Detention division, and I am the Operations Manager. This is a new branch of American Security Distribution which we are honored to be a part of.

To start our "No Holds Barred" series of articles, take a minute and look at the identifying logos for the top four major manufacturers of detention hardware.

Adtec keys shown in Illustration 1, have a bow which is rectangular in shape and the company name is usually embossed on the head of the key for both mogul and paracentric keys.

RR Brink company uses standard builders hardware cylinders, such as Best, Corbin, and Medeco. The vast majority of their locks use the Medeco key (see Illustration 2). The Brink logo is embossed on the head of most Medeco keys.

Folger Adam keys have an elliptical shape to the head. Paracentric keys will inevitably bear a large "A" in the head of the key (see Illustration 3). The mogul keys will usually be embossed with the company name.

Southern Steel Paracentric keys will bear an "SS" logo in the head of the key, and the bow is oval or



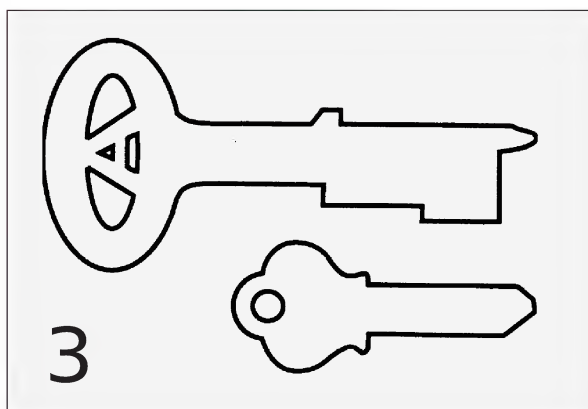
HPC, Inc.
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Quality since 1956

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medeco
HIGH SECURITY LOCKS

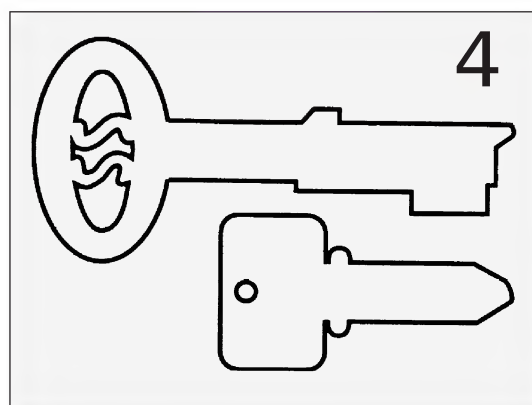
The market leader in locking systems for security, safety, and control.

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Folger Adam keys have an elliptical shape to the head. Paracentric keys will inevitably bear a large "A."

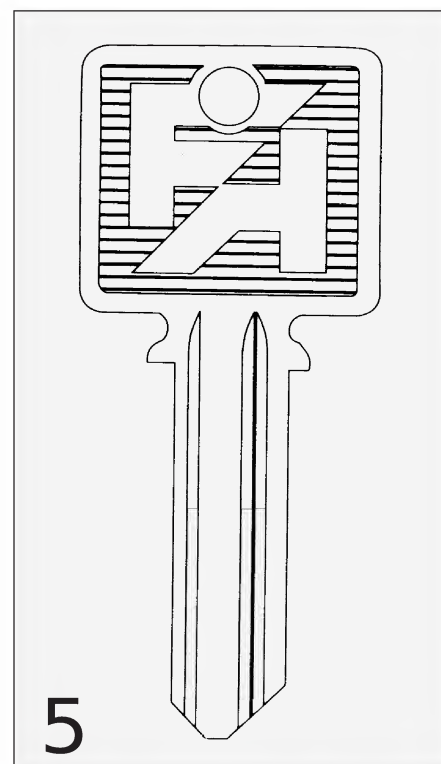
Southern Steel Paracentric keys will bear an "SS" logo in the head of the key, and the bow is oval.



elliptically shaped, just as the Folger Adam Bow is shaped (see Illustration 4). The Southern Steel name can also be stamped on the bow of the mogul key, along with the installers name.

Folger Adams has a Maxi-Mogul key blank, which is square-headed and bears the "F/A" logo, which you will occasionally see (see Illustration 5). Often, information provided on the various keys is the sole method of identifying the manufacturer. Let me go on record as saying even this method isn't absolutely fool-proof. As the major manufacturers begin to broaden their inventory base, they occasionally sell "equivalent" locks, keys and parts. This practice, of course, leads to more potential confusion, just as neutered key blanks can make key identification difficult for beginning locksmiths.

Locks are rarely marked with manufacturer ID, although there are occasional exception to that rule. If you're looking for manufacturer identification on the lock, look for a plasticized data plate, fastened with adhesive to the body of the lock. These are usually one to two-inch squares or rectangles and will contain everything we need to know to identify the lock.



Folger Adam has a Maxi-Mogul key blank, which is square-headed and bears the "F/A" logo.

Once you're reasonably sure of the manufacturer, the next step in lock identification is to measure the lock and study its function. Notice the

placement (or absence) of the latch, bolt, deadlocking pin. Where and how far apart are the anchor screws? How long is the throw. How thick is the bolt? Unlike the hardware functions locksmiths are accustomed to, such as entry, privacy and passage, detention locks have a wide range of functions that may be unfamiliar: hold open, slam lock, automatic latching, latching with deadlock, and sliding locks.

A major difference which occurs in jail and prison locks is that lock functions can be changed or varied, with the use of a key. For example, on a knob-lockout, you can turn the key to the first position and not only lock the lock, but also lock out the knob. Turning the key to a second position will restore the lock to its normal function. When the knob is rotated, the latch is retracted. Always study all the features and functions of a lock before you attempt to identify it.

Incidentally, it's not unusual for a new correctional officer or jail administrator to complain that a lock is "broken" or "not working right" because he is unaware of these variable features and functions. If

you're unsure of how a lock is expected to behave, find the oldest employee at that particular facility and ask him how it's supposed to work. Your other option is to play with the lock and discover how it...and other locks in the same area...are functioning consistently. Or call us...we'll talk about it.

You'll be learning a great many of these professional tips as we proceed through a series of articles.

Now, let me turn you over to Joe for Bucha's best...

TIP OF THE MONTH

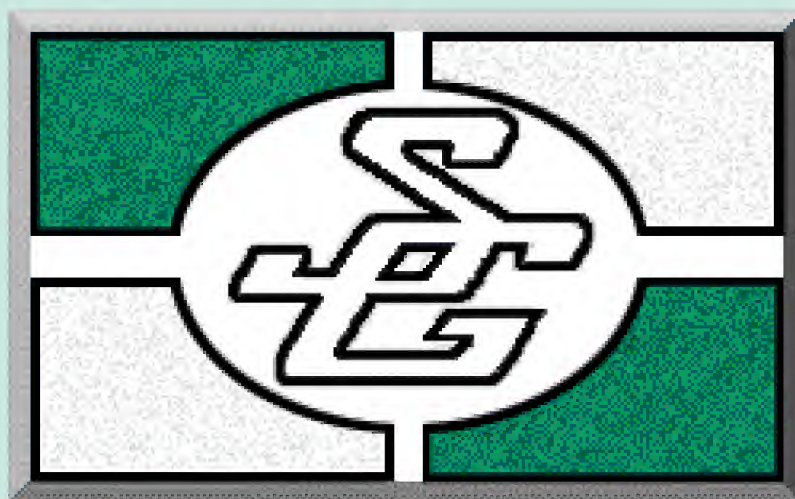
Joe Bucha: It's good to be back on a regular basis with this great magazine. Lots of good folks to talk with, and that's always a welcome pastime for me. So, let's get to it!

One of the most common troubleshooting problems I'm called on to solve, deals with electric door locks malfunctioning when in the locked position. Frequently, the first hint there is a problem occurs when the latch or bolt won't retract. The normal reaction is to troubleshoot the lock. This is not necessarily the first place to look!

Check the hinges. Due to the weight of the doors involved in the prison industry, and their rough treatment, hinges often work loose gradually, creating a sagging door and a mis-aligned lock.

On this same subject, door misalignment (or sagging hinges) can also cause an indication problem when the door position switch (DPS) fails to achieve proper alignment. It helps to remember that when a locksmith is called because the control panel is giving a false or incorrect reading or when a lock is malfunctioning, the odds of a lock problem is usually far smaller than a mis-aligned door. Check it out!

We encourage your questions on any subject dealing with jail and prison locks. Call us; drop us a FAX or an Email. Read the column. Ask some questions. Add new skills to your professional ability and broaden your customer base. Sleep better knowing prisoners in your area are secure...and so is your family! After all, if you can't trust your professional ability...then who, or what, can you trust? **TRL**



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electronic safe locking solutions.***

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THE WEB ZONE

A MONTHLY REVIEW OF WEB SITES

Sargent & Greenleaf

<http://www.sglocks.com>



**Sargent & Greenleaf
Lock Manufacturer**
Makers of Fine Locks and
Security Mechanisms Since 1852

S&G's site is very locksmith oriented, which is particularly nice to see. They allow for product information requests, as well as providing an entire section called "Information for the Locksmith."

In the locksmith section, choices include Technical Support, S&G Insider Page, Safe Lock Distributors, Arm-A-Dor™ Product Information and What's New at S&G. The Web Zone is particularly impressed with the locksmith technical support which is offered online. You'll find trouble shooting advice galore, along with E-Mail support and information, sales kit offerings, test procedures, and 24-hour help for combination locks.

Newman Tonks Group

<http://www.newmantonks.com>



In their extensive web effort, Newman Tonks provides a great deal of information divided into four basic parts: NT Dor-O-Matic, NT Falcon Lock, NT Monarch Hardware and NT Quality Hardware.

When you select any of the companies above, an option allows you to create a custom cut sheet. By answering a series of questions, you can create a very professional piece of literature which is personalized to your specifications. The cut sheet shows photos of the products you selected as well as specs. Though Web Zone suspects this function is intended for hardware specifiers, we think you might like it too.

Americans With Disabilities Act Homepage

<http://www.usa.net/ada.infonet>



With all the questions that arise on ADA regulations, this site will either have the answer, or you will find directions on where to turn. Perhaps the only disadvantage for the locksmith is the hugeness of this site. Locksmiths will be interested in the sections referring to hardware more than anything else.

An unbelievably extensive FAQ's (Frequently Asked Questions) area, seems to answer a large variety of questions. Your only problem with this site is going to be sifting through so much material to find what you want. But if you want an ADA resource, this is it.

Framon Manufacturing

<http://www.framon.com>



Does it bug you as much as it does the Web Zone when a site runs slow? Well, here's one that runs quickly and is loaded with handy tidbits of information. Not only will you find complete data and specs on all of Framon's key machines, but you'll also find updated information on spacings, depths, and more.

For example, if you have a #2 Code Machine, you'll want to download the newest spacing block chart which tells you what spacing block to use. Tip stop data is also presented. And you can also download copies of their various newsletters which are filled with tips and new code information.

Mayflower Sales Co.

<http://www.mfsales.com>



One of the original online wholesaler websites is operated by Mayflower. We like the site because among its features is a virtual tour of their warehouse. If you'd like to see what the table looks like where they pack up your order, it's right online for you to see.

Probably more useful, but no less interesting are the technical details which you can view, including a full explanation of the Ford PATS ignition system. Areas of the site include: What's New, Specials, Databank, Access Controls, Architectural hardware, Safe and Automotive Products.

Greater Philadelphia Locksmiths Association

<http://www.gpl.a.org>



Here is the finest example of an association home page we've seen.

This site has so much information loaded into it that you might not know where to start. You can download shareware and demo software. View an extensive section of distributors, manufacturers, and a locksmith calendar of events, plus much more.

The downloadable shareware is a terrific feature with offerings that include: trade magazine index database, several master keying programs, Ilco's access control system called Millenium, and key control demo software. Many industry links are provided. We hope we can get them to link to *The National Locksmith's* homepage. **TNL**



TEST DRIVE!

ESP Lock Products has long been known as a supplier of lock products to the locksmith industry. Many of the products ESP carries you probably were not even aware they supplied. ESP supplies key blanks; key machines; Hide-A-Keys; key rings and accessories; decoding & spacing gauges; pocket lights; picks and pick guns; pin kits; plug followers; shim stock; plug pullers; car opening tools; cam locks; cabinet locks; glass door locks; lock boxes and much more.

PRODUCT: To add to its lock supply offerings, ESP recently introduced a Mobile Pinning Station to facilitate rekeying work as well as other small jobs. The Mobile Pinning Station was designed to offer an organized work station that can be taken anywhere.

CONSTRUCTION & DESIGN: The base of the Mobile Pinning Station is constructed from a durable Corian which will withstand much abuse. Corian is a type of plastic that is very hard and simulates the appearance of marble.

There are 11 access holes (six across the top and five below the top row) for holding bottom pins, top pins, master pins or springs. In the center of the base is a recessed form pad to place pins, springs, lock cores or plug followers, preventing them from rolling off the surface.

Securely attached to the side of the Mobile Pinning Station is a mini vise to hold locks or cylinders, keeping your hands free for other necessities.

The base of the Mobile Pinning Station measures 14-3/4" x 11-3/4" x 1/2". The vise jaws are 2" wide with the vice standing about 2-1/2" high.

ESP MOBILE PINNING STATION



Like the name implies, the compact size of the Mobile Pinning Station allows simple transport capabilities, allowing you to take this little work station anywhere.

COMMENTS: The vise is a nice feature on this unit, however, depending on where the Mobile Pinning Station is placed, there is a minor annoyance with it. It worked fine and all, but if the base was placed on a table, the handle could not be turned a complete revolution. The handle would hit the table, preventing a full revolution requiring you to lift the handle and then continue rotation every time the handle returned to that same position. To correct the situation, about a 1/2" spacing block would need to be placed under the mini vise. This would raise the vise enough to allow complete handle rotation when placed on a table. If the Mobile Pinning Station was placed on your lap or at the edge of a table, this would not pose a problem.

CONCLUSION: When I first saw this Mobile Pinning Station, I thought, it's cute, but is it practical. After having it however, I find that it really is a handy device which I do use when pinning cylinders.

Is it something I could do without? Yes, I have up to this point, but now that I have it, I do use it. The vise is perfect for small items which can be a problem to hold without damage in my full size table top vise.

When pinning a number of cylinders which are keyed alike, I find it much easier to pull all the pins needed and lay them in the appropriate trays in the base. It makes it easier than searching the pin kit for each pin needed. Once again, a cup cake tray or other similar tray can be used to accomplish the same thing, but with the Mobile Pinning Station positioned in front of my pin kit, it made loading pins in the access holes convenient.

Suggested dealer price for the Mobile Pinning Station is \$79.99. It makes a nice addition to any mobile service vehicle which can be easily moved or stored elsewhere when not needed.

This is certainly not a product that you must have to perform standard lock pinning or any other small task, but it does make that process easier.

For more information on ESP Lock Products call: (508) 537-6121. **TRL**

IN SUMMARY:

DESCRIPTION: A Mobile Pinning Station to facilitate rekeying work as well as other small jobs.

COMMENTS: If placed on a table top, the vice handle did hit the table. If placed elsewhere this was not a problem.

PRICE: \$79.99

TEST DRIVE RESULTS: It makes a nice addition to any mobile service vehicle which can be easily moved or stored elsewhere when not needed.